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FOR: Any person who uses the Federal Register and Code of Federal Regulations.

WHO: The Office of the Federal Register.

WHAT: Free public briefings (approximately 3 hours) to present:

1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.
2. The relationship between the Federal Register and Code of Federal Regulations.
3. The important elements of typical Federal Register documents.
4. An introduction to the finding aids of the FR/CFR system.

WHY: To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

NEW YORK, NY

WHEN: November 23, 9:00 am—12:00 pm

WHERE: National Archives—Northeast Region, 201 Varick Street, 12th Floor, New York, NY

RESERVATIONS: 1–800–347–1997

WASHINGTON, DC

(two briefings)

WHEN: November 30 at 9:00 am and 1:30 pm

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The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

OFFICE OF PERSONNEL MANAGEMENT

5 CFR Part 179

RIN 3206–AF28

Claims Collection Standards; Debt Collection Act of 1982; Administrative Offset

AGENCY: Office of Personnel Management.

ACTION: Interim rule with request for comments.

SUMMARY: The Office of Personnel Management (OPM) is issuing interim regulations to govern the collection of debts owed to the United States which arose from transactions involving OPM's administrative accounts. These regulations implement the debt collection procedures provided under the Debt Collection Act of 1982 (Act). The Act authorizes the Federal Government to collect debts by means of administrative offset from other payments due the debtor from the United States, without the debtor's consent, provided that the debtor is properly notified and given the opportunity to exercise certain administrative rights. OPM's collection of debts due the Retirement and Insurance Group for payment to the Civil Service Retirement and Disability Fund, Employees' Life Insurance Fund, the Retired Federal Employees Health Benefits Fund (74 Stat. 849), or the Employees' Health Benefits Fund is governed by the provisions in 5 CFR part 831, subparts M and N, 5 CFR part 845, subparts B and C, 5 CFR parts 870, 871, 872, and 873, subpart D, and 5 CFR part 890, subpart E, as applicable.

DATES: These regulations are effective November 19, 1993. Comments must be submitted on or before January 18, 1994.

ADDRESSES: Send or deliver written comments to E. John Prebis, Chief Financial Officer (CFO), Office of Personnel Management, room 5489A, 1900 E Street NW., Washington, DC 20415.

FOR FURTHER INFORMATION CONTACT: Anna Wilson, Chief, Financial Policy Division, Office of the CFO, (202) 606–5075.

SUPPLEMENTARY INFORMATION: Section 10 of the Debt Collection Act of 1982 (Act) (Public Law 97–365) makes several changes in the way Executive and Legislative agencies collect debts owed the Government. The purpose of the Act is to improve the ability of the Government to collect monies owed it.

Under the Act, administrative offset may be initiated when the head of an agency determines that an individual or entity is indebted to the United States, or is notified by the head of another agency that a person or entity is indebted to the United States and that the debtor is owed monies by the United States as a result of transactions with a Federal agency. After the debtor has received certain due process rights, the debt may be collected by administratively offsetting the debt against the amount due.

Under the Act, before the Government may collect a debt by administrative offset, a debtor must be provided with notice that a debt is owed, the opportunity to inspect and copy Government records relating to the debt, the option to enter into a written repayment agreement, and an opportunity for review of the agency's determination concerning the existence or the amount of the debt, or the repayment terms. The debtor must notify the agency of his or her intent to exercise these rights within time periods prescribed in these regulations.

The Act permits the agency to initiate an administrative offset prior to the completion of the due process requirements if failure to do so would substantially jeopardize the agency's ability to collect the debt and if the time remaining before payment is to be made does not reasonably permit completion of the due process procedures. Such prior offset must be followed by completion of the due process procedures.

The Act requires agencies to issue regulations for administrative offset. This interim rule establishes the procedures OPM will follow in making an administrative offset from funds paid to a debtor from OPM's administrative accounts. These regulations apply to the collection of debts owed to the United States arising from transactions with OPM other than those involving payments made from the Civil Service Retirement and Disability Fund (the Fund), or where a request for an offset from OPM's administrative accounts—other than the Fund—is received by OPM from another Federal Agency. Regulations for other agencies to request OPM's Retirement and Insurance Group to recover a debt from the Fund are provided at subpart R of part 831 of title 5, Code of Federal Regulations. These regulations are consistent with the Federal Claims Collection Standards on administrative offset issued jointly by the Department of Justice and the General Accounting Office as set forth in 4 CFR 102.3.

OPM has determined that this document is interpretative because it merely implements a definitive statutory scheme and the requirements contained in regulations promulgated by the Department of Justice and the General Accounting Office. Accordingly, no Notice of Proposed Rulemaking is required pursuant to 5 U.S.C. 553(b)(A). In addition, because this rule relates to agency management and personnel, no Notice of Proposed Rulemaking is required pursuant to 5 U.S.C. 553(a)(2). Moreover, for these reasons, a delayed effective date is not required pursuant to 5 U.S.C. 553(d)(2). The Office will, however, consider any public comments before issuing a final rule.

Executive Order (E.O.) 12291, Federal Regulation

OPM has determined that this is not a major rule as defined under Section 1(b) of E.O. 12291, Federal Regulation.

Regulatory Flexibility Act

I certify that these regulations will not have a significant economic impact on a substantial number of small entities because they are regulations that will affect only Federal employees.

List of Subjects in 5 CFR Part 179

Claims.

U.S. Office of Personnel Management.

Patricia W. Lattimore,

Acting Deputy Director.

Accordingly, OPM is amending part 179 of title 5 of the Code of Federal Regulations as follows:

PART 179—CLAIMS COLLECTION STANDARDS

1. The authority citation in part 179 is revised to read as follows:

Authority: 31 U.S.C. 952; 5 U.S.C. 1103; Reorganization Plan No. 2 of 1978; 5 U.S.C. 5514; 5 CFR part 550 subpart K; 31 U.S.C. 3701; 31 U.S.C. 3711; 31 U.S.C. 3716; 31 U.S.C. 3720A.

2. Subpart C, consisting of §§ 179.301 through 179.309, is added to read as follows:

Subpart C—Administrative Offset

Sec.

179.301 Scope of regulations.
179.302 Definitions.
179.303 General.
179.304 Notification procedures.
179.305 Agency review.
179.306 Written agreement for repayment.
179.307 Administrative offset.
179.308 Accelerated procedures.
179.309 Additional administrative procedures.

Subpart C—Administrative Offset

§ 179.301 Scope of regulations.

These regulations apply to the collection of debts owed to the United States arising from transactions with OPM other than those involving payments made from the Civil Service retirement and Disability Fund (the Fund), or where a request for an offset from OPM's administrative accounts—other than the Fund—is received by OPM from another Federal agency. Regulations for other agencies to request OPM's Retirement and Insurance Group to recover a debt from the Fund are provided at subpart R of part 831 of title 5, Code of Federal Regulations. These regulations are consistent with the Federal Claims Collection Standards on administrative offset issued jointly by the Department of Justice and the General Accounting Office as set forth in 4 CFR 102.3.

§ 179.302 Definitions.

Administrative offset, as defined in 31 U.S.C. 3701(a)(1), means withholding money payable by the United States Government to, or held by the Government for, a person to satisfy a debt the person owes the Government.

Person, includes a natural person or persons, profit or nonprofit corporation, partnership, association, trust, estate, consortium, or other entity which is capable of owing a debt to the United States Government except that agencies of the United States, or of any State or local government, shall be excluded.

§ 179.303 General.

(a) The Director or his or her designee, after attempting to collect a debt from a person under section 3(a) of the Federal Claims Collection Act of 1966, as amended (31 U.S.C. 3711(a)), may collect the debt by administrative offset subject to the following:

(1) The debt is certain in amount; and

(2) It is in the best interest of the United States to collect the debt by administrative offset because it is less costly and speeds payment of the debt;

(b) The Director, or his or her designee, may initiate administrative offset with regard to debts owed by a person to another agency of the United States Government, upon receipt of a request from the head of another agency, or his or her designee, and a certification that the debt exists and that the person has been afforded the necessary due process rights.

(c) The Director, or his or her designee, may request another agency that holds funds payable to an OPM debtor to offset the debt against the funds held and will provide certification that:

(1) The debt exists; and

(2) The person has been afforded the necessary due process rights.

(d) If the 6-year period for bringing action on a debt provided in 28 U.S.C. 2415 has expired, then administrative offset may be used to collect the debt only if the costs of bringing such action are likely to be less than the amount of the debt.

(e) No collection by administrative offset shall be made on any debt that has been outstanding for more than 10 years unless facts material to the Government's right to collect the debt were not known, and reasonably could not have been known, by the official or officials responsible for discovering and collecting such debt.

(f) These regulations do not apply to:

(1) A case in which administrative offset of the type of debt involved is explicitly provided for or prohibited by another statute.

(2) Debts owed to OPM by other agencies of the United States or by any State or local government.

§ 179.304 Notification procedures.

Before collecting any debt through administrative offset, a notice of intent to offset shall be sent to the debtor by certified mail, return receipt requested, at the most current address that is available to OPM. The notice shall provide:

(a) A description of the nature and amount of the debt and the intention of OPM to collect the debt through administrative offset;

(b) An opportunity to inspect and copy the records of OPM with respect to the debt;

(c) An opportunity for review within OPM concerning OPM's determinations with respect to the debt; and

(d) An opportunity to enter into a written agreement for the repayment of the amount of the debt.

§ 179.305 Agency review.

(a) A debtor may dispute the existence of the debt, the amount of the debt, or the terms of repayment. The request to review a disputed debt must be received by the OPM official identified in the notification within 30 calendar days of the debtor's receipt of the written notice described in § 179.305.

(b) If the debtor requests an opportunity to inspect or copy OPM's records concerning the disputed claim, 10 business days will be granted for the review. The time period will be measured from the time the request for inspection is granted or from the time the copy of the records is received by the debtor.

(c) Pending the resolution of a dispute initiated by the debtor, transactions in any of the debtor's account(s) maintained in OPM may be temporarily suspended. Depending on the type of transaction, the suspension could preclude payment, removal, or transfer, as well as prevent the payment of interest or discount due thereon. Should the dispute be resolved in the debtor's favor, the suspension will be lifted immediately.

(d) During the review period, interest, penalties, and administrative costs authorized under the Federal Claims Collection Act of 1966, as amended, will continue to accrue.

§ 179.306 Written agreement for repayment.

A debtor who admits liability but elects not to have the debt collected by administrative offset will be afforded an opportunity to negotiate a written agreement for the repayment of the debt. If the financial condition of the debtor does not support the ability to pay in one lump-sum, reasonable installments may be considered. No installment arrangement will be considered unless the debtor submits a financial statement, executed under penalty of perjury, reflecting the debtor's assets, liabilities, income, and expenses. The financial statement must be submitted within 10 business days of OPM's request for the statement. At OPM's option, a confess-judgment note or bond of indemnity with surety may be required for the installment agreement. Notwithstanding the provisions of this section, any reduction or compromise of a claim will be governed by 4 CFR part 103 and 31 U.S.C. 3711.

§ 179.307 Administrative Offset.

(a) If the debtor does not exercise the right to request a review within the time specified in § 179.305 or, if as a result of the review, it is determined that the debt is due and no written agreement is executed, then administrative offset shall be ordered in accordance with these regulations without further notice.

(b) *Request for offset to a Federal agency.* The Director or his or her designee may request that funds due and payable to a debtor by a Federal agency be administratively offset in order to collect a debt owed to OPM by that debtor. In requesting administrative offset OPM, as creditor, will certify in writing to the Federal agency holding funds of the debtor:

(1) That the debtor owes the debt;

(2) The amount and basis of the debt; and

(3) That OPM has complied with the requirements of 31 U.S.C. 3716, its own administrative offset regulations, and the applicable provisions of 4 CFR part 102 with respect to providing the debtor with due process.

(c) *Request for offset from a Federal agency.* When administrative offset is authorized, any Federal creditor agency may request OPM to make an administrative offset from any OPM funds that are due and payable to a creditor agency's debtor. OPM shall initiate the requested administrative offset only upon:

(1) Receipt of written certification from the creditor agency:

(i) That the debtor owes the debt;

(ii) The amount and basis of the debt;

(iii) That the agency has prescribed regulations for the exercise of administrative offset; and

(iv) That the agency has complied with its own administrative offset regulations and with the applicable provisions of 4 CFR part 102, including providing any required hearing or review.

(2) A determination by OPM that collection by offset against funds payable by OPM would not otherwise be contrary to law.

§ 179.308 Accelerated procedures.

OPM may make an administrative offset against a payment to be made to the debtor prior to the completion of the procedures required by § 179.304 and § 179.305 if failure to take the offset would substantially jeopardize OPM's ability to collect the debt, and the time before the payment is to be made does not reasonably permit the completion of those procedures. Such prior offset shall be promptly followed by the completion of those procedures. Amounts recovered by offset but later found not to be owed to OPM shall be promptly refunded.

§ 179.309 Additional administrative procedures.

Nothing contained in this chapter is intended to preclude the use of any other administrative remedy which may be available.

[FR Doc. 93–28410 Filed 11–18–93; 8:45 am]

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5 CFR Part 179

RIN 3206–AF29

Claims Collection Standards; Debt Collection Act of 1982: Salary Offset

AGENCY: Office of Personnel Management.

ACTION: Interim rule with request for comments.

SUMMARY: The Office of Personnel Management (OPM) is issuing interim regulations to govern the collection of debts owed to OPM's administrative accounts by Federal employees. These regulations implement the debt collection procedures provided under section 5 of the Debt Collection Act of 1982 (Act). The Act authorizes the Federal Government to collect debts by means of offset from the salaries of Federal employees without the employee's consent, provided that the employee is properly notified and given the opportunity to exercise certain administrative rights. OPM's collection of debts due the Retirement and Insurance Group for payment to the Civil Service Retirement and Disability Fund, Employees' Life Insurance Fund, the Retired Federal Employees Health Benefits Fund, or the Employees' Health Benefits Fund is governed by other regulatory provisions.

DATES: These regulations are effective November 19, 1993. Comments must be submitted on or before January 18, 1994.

ADDRESSES: Send or deliver written comments to E. John Prebis, Chief Financial Officer (CFO), Office of Personnel Management, room 5489A, 1900 E Street NW., Washington, DC 20415.

FOR FURTHER INFORMATION CONTACT: Anna Wilson, Chief, Financial Policy Division, Office of the CFO, (202) 606–5075.

SUPPLEMENTARY INFORMATION: Section 5 of the Debt Collection Act of 1982 (Act) (Public Law 97–365), codified at 5 U.S.C. 5514, makes several changes in the way Executive and Legislative agencies collect debts owed the Government. The purpose of the Act is to improve the ability of the Government to collect monies owed it.

Under the Act, when the head of an agency determines that an employee of any agency is indebted to the United States, or is notified by the head of another agency that an agency employee is indebted to the United States, the employee's debt may be offset against his/her pay. Before agencies may use the salary offset recovery procedure, certain due process rights must be extended to the debtor.

Under the Act, before the Government may collect a debt by salary offset, an employee-debtor must be provided with notice of the debt and the opportunity to (1) inspect and copy Government records relating to the debt, (2) enter into a written repayment agreement, and (3) request an impartial hearing on the determination of the agency concerning the existence or the amount of the debt. The employee must notify the agency of his or her intent to exercise these rights within the time period prescribed in the regulations.

The Act requires agencies to issue regulations for salary offset. This interim rule establishes the procedures the Office of Personnel Management (OPM) will follow in making a salary offset. OPM has determined that this document is interpretative because it merely implements a definitive statutory scheme and the requirements contained in regulations promulgated by OPM, codified in 5 CFR part 550, subpart K. Accordingly, no Notice of Proposed Rulemaking is required pursuant to 5 U.S.C. 553(b)(A). In addition, because this rule relates to agency management and personnel, no Notice of Proposed Rulemaking is required pursuant to 5 U.S.C. 553(a)(2). Moreover, for these reasons, a delayed effective date is not required pursuant to 5 U.S.C. 553(d)(2). The Office will, however, consider any public comments before issuing a final rule.

Executive Order (E.O.) 12291, Federal Regulation

OPM has determined that this is not a major rule as defined under Section 1(b) of E.O. 12291, Federal Regulation.

Regulatory Flexibility Act

I certify that these regulations will not have a significant economic impact on a substantial number of small entities because they are regulations that will affect only employees of the Federal Government.

List of Subjects in 5 CFR Part 179

Claims.

U.S. Office of Personnel Management.

Patricia W. Lattimore,

Acting Deputy Director.

Accordingly, OPM is amending title 5, Code of Federal Regulations, part 179 as follows:

PART 179—CLAIMS COLLECTION STANDARDS

1. The authority citation for part 179 is revised to read as follows:

Authority: 31 U.S.C. 952; 5 U.S.C. 1103; Reorganization Plan No. 2 of 1978; 5 U.S.C. 5514; 5 CFR part 550 subpart K.

2. Sections 179.101 and 179.102 are designated "Subpart A—General Provisions and Administration".

3. Section 179.102 of Subpart A is revised to read as follows:

§ 179.102 Delegation of authority.

(a) The Chief Financial Officer and his or her delegatees are designated by the Director and authorized to perform all the duties for which the Director is responsible under the Debt Collection Act of 1982 and Office of Personnel Management regulations with the exception of debts arising from the Civil Service Retirement and Disability Fund, the employees' Life Insurance Fund, the Retired Federal Employees Health Benefits Act (74 Stat. 849), and the Employees Health Benefits Fund. However, all claims processed by the Chief Financial Officer and his or her delegatees for compromise, suspension, and termination of collection action in amounts of $2,500 or more must be recommended by the General Counsel or his or her designee.

(b) The Associate Director for Retirement and Insurance and his or her delegatees are designated by the Director and authorized to perform all the duties for which the Director is responsible under the Debt Collection Act of 1982 and Office of Personnel Management regulations on debts caused by payments from the Civil Service Retirement and Disability Fund (subchapter III of chapter 83 or chapter 84), claims under the provisions of the Federal Employees' Life Insurance Fund (chapter 87) the Retired Federal Employees Health Benefits Act (74 Stat. 849), the Employees Health Benefits Fund (chapter 89), the Panama Canal Construction Annuity Act (58 Stat. 257), and the Lighthouse Service Widows' Annuity Act (64 Stat. 465).

3. Subpart B, consisting of §§ 179.201 through 179.218, is added to read as follows:

Subpart B—Salary offset

Sec.

179.201 Purpose.
179.202 Scope.
179.203 Definitions.
179.204 Applicability of regulations.
179.205 Waiver requests and claims to the General Accounting Office.
179.206 Notice requirements before offset.
179.207 Hearing.
179.208 Certification.
179.209 Voluntary repayment agreements as alternative to salary offset.
179.210 Special review.
179.211 Notice of salary offset.
179.212 Procedures for salary offset.
179.213 Coordinating salary offset with other agencies.
179.214 Interest, penalties and administrative costs.
179.215 Refunds.
179.216 Request for the services of a hearing official when the creditor agency is not OPM.
179.217 Non-waiver of rights by payments.
179.218 Additional administrative collection action.

Subpart B—Salary Offset

§ 179.201 Purpose.

The purpose of the Debt Collection Act of 1982 (Public Law 97–365), is to provide a comprehensive statutory approach to the collection of debts due the Federal Government. The regulations in this subpart implement section 5 of the Act which authorizes the collection of debts owed by Federal employees to the Federal Government by means of salary offset, except that no claim may be collected by such means if outstanding for more than 10 years after the agency's right to collect the debt first accrued, unless facts material to the Government's right to collect were not known, and could not reasonably have been known, by the official or officials who were charged with the responsibility for discovery and collection of such debts. The regulations in this subpart are consistent with the regulations on salary offset issued by the Office of Personnel Management (OPM) in 5 CFR part 550, subpart K.

§ 179.202 Scope.

(a) The regulations in this subpart provide procedures for the collection of monies from a Federal employee's pay by salary offset to satisfy certain debts owed the Government.

(b) The regulations in this subpart apply to all collections by the Director of OPM except collections involving debts because of payments made from the Civil Service Retirement and Disability Fund, payments made under the Retired Federal Employees Health Benefits Act (74 Stat. 849), the Panama Canal Construction Annuity Act and the Lighthouse Service Widows' Annuity Act and payments or premiums relating to the Federal Employees' Life Insurance Fund or the Federal Employees Health Benefits Funds, from:

(1) Federal employees who owe debts to OPM; and

(2) OPM employees who owe debts to other agencies.

(c) The regulations in this subpart do not apply to debts or claims arising under the Internal Revenue Code of 1954, as amended (26 U.S.C. 1 *et seq.*); the Social Security Act (42 U.S.C. 301 *et seq.*); the tariff laws of the United States; or to any case where collection of a debt by salary offset is explicitly provided for or prohibited by another statute (e.g., travel advances in 5 U.S.C. 5705 and employee training expenses in 5 U.S.C. 4108).

(d) Section 179.207, Notice Requirement, does not apply to any adjustment to pay arising from an employee's election of coverage or a change in coverage under a Federal benefits program requiring periodic deductions from pay, if the amount to be recovered was accumulated over four pay periods or less.

(e) Nothing in the regulations in this subpart precludes the compromise, suspension, or termination of collection actions, where appropriate, under the standards implementing the Federal Claims Collection Act (31 U.S.C. 3711 *et seq.*, 4 CFR parts 101 through 105, 38 CFR part 1.

(f) Nothing in the regulations in this subpart precludes an employee from requesting a waiver of the debt under applicable statute; under the standards and procedures specified by the Federal Claims Collection Standards (FCCS); or waiver of salary overpayment under 5 U.S.C. 5584, 10 U.S.C. 2774, or 32 U.S.C. 716, by submitting a subsequent claim to the General Accounting Office in accordance with procedures established by the General Accounting Office.

§ 179.203 Definitions.

As used in this part (except where the term is otherwise defined in this part) the following definitions shall apply:

Agency means:

(1) An Executive Agency as defined by section 105 of title 5, United States Code, including the U.S. Postal Service and the U.S. Postal Rate Commission;

(2) A military department as defined by section 102 of title 5, United States Code;

(3) An agency or court of the judicial branch including a court as defined in section 610 of title 28, United States Code, the District Court for the Northern Mariana Islands and the Judicial Panel on Multidistrict Litigation;

(4) An agency of the legislative branch, including the U.S. Senate and the U.S. House of Representatives; and

(5) Other independent establishments that are entities of the Federal Government.

Certification means a written debt claim, as prescribed by § 179.209, that is received from a creditor agency and which requests the paying agency to offset the salary of an employee.

Creditor agency means an agency of the Federal Government to which the debt is owed. For purposes of this part *creditor agency* includes OPM, unless otherwise noted.

Debt or *claim* means money owed by an employee of the Federal Government to an agency of the Federal Government, from sources which include loans insured or guaranteed by the United States and all other amounts due the Government from fees, leases, rents, royalties, services, sales of real or personal property, overpayments, penalties, damages, interests, fines and forfeitures (except those arising under the Uniform Code of Military Justice) and all other similar sources.

Delinquent means the failure to pay an obligation or debt by the date specified in the initial notification or applicable contractual agreement, unless other payment arrangements have been agreed to by OPM and the debtor by that date, or if, at any time thereafter, the debtor fails to satisfy the obligations under a payment agreement with the creditor agency.

Director means the Director of OPM or his or her designee.

Disposable pay means that part of current basic pay, special pay, incentive pay, retired pay, retainer pay, or, in the case of an employee not entitled to basic pay, other authorized pay remaining after the deduction of any amount required by law to be withheld. OPM shall allow the following deductions, and any others required by law to be withheld, in determining disposable pay subject to salary offset;

(1) Federal employment taxes;

(2) Amounts mandatorily withheld for the U.S. Soldiers' and Airmen's Home;

(3) Fines and forfeitures ordered by a court martial or by a commanding officer;

(4) Federal, state or local income taxes no greater than would be the case if the employee claimed all dependents to which he or she is entitled and such additional amounts for which the employee presents evidence of a tax obligation supporting the additional withholding;

(5) Amounts withheld from benefits payable under title II of the Social Security Act where the withholding is required by law;

(6) Amounts deducted for Medicare;

(7) Health insurance premiums;

(8) Normal retirement contributions as explained in 5 CFR 581.105(e) (e.g., Civil Service Retirement deductions, Survivor Benefit Plan or Retired Serviceman's Family Protection Plan);

(9) Normal life insurance premiums (e.g., Serviceman's Group Life Insurance and *basic* Federal Employee's Group Life Insurance premiums) exclusive of optional life insurance premiums; and

(10) Garnishments resulting from a legal process and creating legal obligations in accordance with 5 CFR 581.102(f) and (g).

Employee means a current employee of OPM or other agency, including a current member of the Armed Forces or Reserve of the Armed Forces of the United States.

FCCS means the Federal Claims Collection Standards jointly published by the Department of Justice and the General Accounting Office at 4 CFR part 101.

Hearing official means an individual (including an administrative law judge) responsible for conducting any hearing with respect to the existence or amount of a debt claimed, and rendering a decision on the basis of such hearing. A hearing official may not be under the supervision or control of the Director of OPM when OPM is the creditor agency.

Notice of intent to offset or *notice of intent* means a written notice for a creditor agency to an employee that states the creditor agency's determination that the employee owes a debt to the creditor agency and apprises the employee of certain administrative rights.

Notice of salary offset means a written notice from the paying agency to an employee after a certification has been issued by the creditor agency, informing the employee that salary offset will begin at the next officially established pay interval.

Office means the central and regional offices of the Office of Personnel Management.

Paying agency means the agency of the Federal Government which employs the individual who owes a debt to an agency of the Federal Government. In some cases, OPM may be both the creditor agency and the paying agency.

Payroll office means the payroll office in the paying agency which is primarily responsible for the payroll records and the coordination of pay matters with the appropriate personnel office with respect to an employee. Payroll office, with respect to OPM, means the central payroll office.

Salary offset means an administrative offset to collect a debt under 5 U.S.C. 5514 by deduction(s) at one or more officially established pay intervals from the current pay account of an employee, without his or her consent.

Salary Offset Coordinator means an official, designated by the Director of OPM, who is responsible for coordinating debt collection activities for OPM.

Waiver means the cancellation, remission, forgiveness, or non-recovery of a debt allegedly owed by an employee to OPM or another agency as permitted or required by 5 U.S.C. 5584, 10 U.S.C. 2774, 32 U.S.C. 716, or any other law.

§ 179.204 Applicability of regulations.

The regulations in this subpart are to be followed for all OPM collections except those involving retirement, life, and health insurance debts for recovery by the Associate Director for Retirement and Insurance, in instances where:

(a) OPM is owed a debt by an individual currently employed by another agency;

(b) OPM is owed a debt by an individual who is a current employee of OPM; or

(c) OPM currently employs an individual who owes a debt to another Federal agency. Upon receipt of proper certification from the creditor agency, OPM will offset the debtor-employee's salary in accordance with the regulations in this subpart.

§ 179.205 Waiver requests and claims to the General Accounting Office.

The regulations in this subpart do not preclude an employee from requesting waiver of an overpayment under 5 U.S.C. 5584, 10 U.S.C. 2774, 32 U.S.C. 716, or in any way questioning the amount or validity of a debt by submitting a subsequent claim to the General Accounting Office in accordance with the procedures prescribed by the General Accounting Office. The regulations in this subpart do not preclude an employee from requesting a waiver pursuant to other statutory provisions pertaining to the particular debt being collected.

§ 179.206 Notice requirements before offset.

(a) Deductions under the authority of 5 U.S.C. 5514 shall not be made unless the creditor agency provides the employee with written notice that he/she owes a debt to the Federal Government, a minimum of 30 calendar days before salary offset is initiated. When OPM is the creditor agency, this notice of intent to offset an employee's salary shall be hand-delivered at work,

or sent by registered mail, return receipt requested, to the employee's most current address that is available to the Office and will state:

(1) That the creditor agency has reviewed the records relating to the claim and has determined that a debt is owed, the amount of the debt, and the facts giving rise to the debt;

(2) The creditor agency's intention to collect the debt by means of deduction from the employee's current disposable pay account until the debt and all accumulated interest are paid in full;

(3) The amount, frequency, beginning date, and duration of the intended deductions;

(4) An explanation of OPM's policy concerning interest, penalties and administrative costs including a statement that such assessments must be made unless excused in accordance with the FCCS, 4 CFR part 101;

(5) The employee's right to inspect and copy all records of the office pertaining to the debt claimed, or to request and to receive copies of such records if personal inspection is impractical;

(6) If not previously provided, the opportunity to establish a schedule for the voluntary repayment of the debt through offset or to enter into an agreement to establish a schedule for repayment of the debt in lieu of offset (4 CFR 102.2(e)). The agreement must contain terms agreeable to the Office and must be in such form that it is legally enforceable. The agreement must:

(i) Be in writing;

(ii) Be signed by both the employee and the creditor agency;

(iii) Specify all the terms of the arrangement for payment; and

(iv) Contain a provision accelerating the debt in the event of a default by the debtor, but such an increase may not result in a deduction that exceeds 15 percent of the employee's disposable pay unless the employee has agreed in writing to the deduction of a greater amount (5 CFR 550.1104(i)).

(7) The right to a hearing conducted by an impartial hearing official (an administrative law judge, or alternatively, a hearing official not under the supervision or control of the Director) with respect to the existence and amount of the debt claimed, or the repayment schedule (i.e., the percentage of disposable pay to be deducted each pay period), so long as a petition is filed by the employee as prescribed in § 179.207;

(8) The method and time period for requesting a hearing;

(9) The name, address and phone number of an official or employee of the Office who may be contacted concerning procedures for requesting a hearing;

(10) The name and address of the office to which the petition for a hearing should be sent;

(11) That a timely and properly filed petition for hearing will stay the commencement of collection proceedings (a timely filing must be received in the office specified under paragraph (a)(10) of this section within 15 calendar days after receipt of such notice of intent to offset);

(12) That the Office will initiate certification procedures to implement a salary offset (which may not exceed 15 percent of the employee's disposable pay) not less than 30 days from the date of receipt of the notice of debt, unless the employee files a timely petition for a hearing;

(13) That a final decision on the hearing (if a hearing is requested) will be issued at the earliest practical date, but not later than 60 days after the filing of the petition requesting the hearing, unless the employee requests and the hearing official grants a delay in the proceedings;

(14) That any knowingly false or frivolous statements, representations, or evidence may subject the employee to:

(i) Disciplinary procedures appropriate under Chapter 75 of title 5, United States Code, part 752 of title 5, Code of Federal Regulations, or any other applicable statute or regulations;

(ii) Penalties under the False Claims Act, sections 3729 through 3731 of title 31, United States Code, or any other applicable statutory authority; and

(iii) Criminal penalties under sections 286, 287, 1001, and 1002 of title 18, United States Code, or any other applicable statutory authority;

(15) Any other rights and remedies available to the employee under statutes or regulations governing the program for which the collection is being made;

(16) That unless there are applicable contractual or statutory provisions to the contrary, amounts paid on or deducted for the debt, which are later waived or found not owed to the United States, will be promptly refunded to the employee; and

(17) That proceedings with respect to such debt are governed by section 5 of the Debt Collection Act of 1982 (5 U.S.C. 5514).

(b) The Office is not required to comply with paragraph (a) of this section for any adjustment to pay arising from:

(1) An employee's selection of coverage or a change in coverage under a Federal benefits program requiring periodic deductions from pay, if the amount to be recovered was accumulated over four pay periods or less;

(2) An employee's consent to make voluntary withholdings from his or her current pay account.

§ 179.207 Hearing.

(a) *Request for hearing.* Except as provided in paragraph (b) of this section, an employee who desires a hearing concerning the existence or amount of the debt or the proposed offset schedule must send such a request to the office designated in the notice of intent (§ 179.207(a)(10)). The request (or petition) for hearing must be received by the designated office not later than 15 calendar days following the employee's receipt of the notice. The employee's request (or petition) must:

(1) Be signed by the employee;

(2) Fully identify and explain with reasonable specificity all the facts, evidence and witnesses, if any, that the employee believes support his or her position; and

(3) Specify whether an oral or paper hearing is requested. If an oral hearing is desired, the request should explain why the matter cannot be resolved by review of the documentary evidence alone (4 CFR 102.3(c)).

(b) *Failure to timely submit.*

(1) If the employee files a petition for a hearing after the expiration of the 15 calendar day period provided for in paragraph (a) of this section, the Office may accept the request if the employee can show that the delay was the result of circumstances beyond his or her control or failure to receive actual notice of the filing deadline (unless the employee had actual notice of the filing deadline).

(2) An employee waives the right to a hearing, and will have his or her disposable pay offset in accordance with the Office offset schedule, if the employee:

(i) Fails to file a timely request for a hearing unless such failure is excused; or

(ii) Fails to appear at an oral hearing of which he or she was notified unless the hearing official determines that failure to appear was due to circumstances beyond the employee's control.

(c) *Representation at the hearing.* The creditor agency may be represented by legal counsel. The employee may represent himself or herself or may be represented by an individual of his or her choice and at his or her expense.

(d) *Review of Office records related to the debt.*

(1) An employee who intends to inspect or copy creditor agency records

related to the debt, as provided by § 179.207(a)(5), must send a letter to the official designated in the notice of intent to offset stating his or her intention. The letter must be received within 15 calendar days after the employee's receipt of the notice.

(2) In response to a timely request submitted by the debtor, the designated official will notify the employee of the location and time when the employee may inspect and copy records related to the debt.

(3) If personal inspection is impractical, arrangements shall be made to send copies of such records to the employee.

(e) *Hearing official.* The Office may request an administrative law judge to conduct the hearing, or the Office may obtain a hearing official who is not under the supervision or control of the Director of OPM.

(f) *Obtaining the services of a hearing official when OPM is the creditor agency.*

(1) When the debtor is not an OPM employee and in the event that the Office cannot provide a prompt and appropriate hearing before a hearing official furnished pursuant to another lawful arrangement, the Office may contact an agent of the paying agency designated in 5 CFR part 581, appendix A, or other individual designated by the paying agency, and request a hearing official.

(2) When the debtor is an OPM employee, the Office may contact any agent of another agency designated in 5 CFR part 581, appendix A, or otherwise designated by that agency, to request a hearing official.

(g) *Procedure.*

(1) *General.* After the employee requests a hearing, the hearing official shall notify the employee of the form of the hearing to be provided. If the hearing will be oral, the notice shall set forth the date, time and location of the hearing. If the hearing will be paper, the employee shall be notified that he or she should submit arguments in writing to the hearing official by a specified date after which the record shall be closed. This date shall give the employee reasonable time to submit documentation.

(2) *Oral hearing.* An employee who requests an oral hearing shall be provided an oral hearing if the hearing official determines that the matter cannot be resolved by review of documentary evidence alone (e.g., when an issue of credibility or veracity is involved). The hearing is not an adversarial adjudication and need not take the form of an evidentiary hearing. Oral hearings may take the form of, but are not limited to:

(i) Informal conferences with the hearing official, in which the employee and agency representative will be given full opportunity to present evidence, witnesses, and argument;

(ii) Informal meetings with an interview of the employee; or

(iii) Formal written submissions with an opportunity for oral presentation.

(3) *Paper hearing.* If the hearing official determines that an oral hearing is not necessary, he or she will make a determination based upon a review of the available written record (4 CFR 102.3(c) (2) and (3)).

(4) *Record.* The hearing official must maintain a summary record of any hearing provided by this subpart (4 CFR 102.3(c)(1)(ii)). Witnesses who testify in oral hearings will do so under oath or affirmation.

(h) *Date of decision.* The hearing official shall issue a written opinion stating his or her decision, based upon documentary evidence and information developed at the hearing, as soon as practicable after the hearing, but not later than 60 days after the date on which the petition was received by the creditor agency, unless the employee requests a delay in the proceedings. In such case the 60-day decision period shall be extended by the number of days by which the hearing was postponed.

(i) *Content of decision.* The written decision shall include:

(1) A statement of the facts presented to support the origin, nature, and amount of the debt;

(2) The hearing official's findings, analysis, and conclusions including a determination whether the debtor's petition for hearing was baseless and resulted from an intent to delay creditor agency collection activity and whether the office should pursue other actions against the debtor as provided by 5 CFR 550.1104(d)(11); and

(3) The terms of any repayment schedules, if applicable.

(j) *Failure to appear.* In the absence of good cause shown (e.g., illness), an employee who fails to appear at a hearing shall be deemed, for the purpose of this subpart, to admit the existence and amount of the debt as described in the notice of intent. If the representative of the creditor agency fails to appear, the hearing official shall schedule a new hearing date at the request of the agency representative. Both parties shall be given reasonable notice of the time and place of the new hearing.

§ 179.208 Certification.

(a) OPM salary offset coordinator shall provide a certification to the paying agency in all cases where:

(1) The hearing official determines that a debt exists;

(2) The employee fails to contest the existence and amount of the debt by failing to request a hearing; or

(3) The employee fails to contest the existence of the debt by failing to appear at a hearing.

(b) The certification must be in writing and must state:

(1) That the employee owes the debt;

(2) The amount and basis of the debt;

(3) The date the Government's right to collect the debt first accrued;

(4) That the Office's regulations have been approved by OPM pursuant to 5 CFR part 550, subpart K;

(5) The date on which payment(s) is due;

(6) If the collection is to be made in installments, the number of installments to be collected, the amount of each installment or percentage of disposable pay, and the commencement date of the first installment, if a date other than the next officially established pay period is required; and

(7) The date(s) of any action(s) taken under 5 U.S.C. 5514(b).

§ 179.209 Voluntary repayment agreements as alternative to salary offset.

(a)(1) In response to a notice of intent, an employee may purpose to repay the debt by making voluntary installment payments as an alternative to salary offset. An employee who wishes to repay a debt without salary offset shall submit in writing a proposed agreement to repay the debt. The proposal shall admit the existence of the debt, and the agreement must be in such form that it is legally enforceable. The agreement must:

(i) Be in writing;

(ii) Be signed by both the employees and the creditor agency;

(iii) Specify all the terms of the arrangement for repayment;

(iv) Contain a provision accelerating the debt in the event of default by the debtor, but such an increase may not result in a deduction that exceeds 15 percent of the employee's disposable pay unless the employee has agreed in writing to deduction of a greater amount (5 CFR 550.1104(i)).

(2) Any proposal under paragraph (a) of this section must be received by the official designated in the notice of intent within 30 calendar days after receipt of the notice.

(b) The creditor agency will review a timely and properly submitted repayment proposal by the employee

debtor and notify the employee whether the proposed written agreement for repayment is acceptable. It is within the creditor agency's discretion to accept a repayment agreement instead of proceeding by offset.

(c) If the creditor agency decides that the proposed repayment agreement is unacceptable, the employee will have 15 days from the date he or she received notice of that decision to file a petition for a hearing or a special review as provided by § 179.210.

(d) If the creditor agency decides that the proposed repayment agreement is acceptable, the alternative arrangement must be in writing, signed by both the employee and the creditor agency designee and meet the other requirements of this section for a voluntary repayment agreement.

§ 179.210 Special review.

(a) An OPM employee subject to salary offset or a voluntary repayment agreement, may, at any time, request a special review by the Office of the amount of the salary offset or voluntary payment, based on materially changed circumstances such as, but not limited to, catastrophic illness, divorce, death, or disability.

(b)(1) In determining whether an offset would prevent the employee from meeting essential subsistence expenses (food, housing, clothing, transportation and medical care), the employee shall submit a detailed statement and supporting documents for the employee, his or her spouse, and dependents indicating:

(i) Income from all sources;

(ii) Assets;

(iii) Liabilities;

(iv) Number of dependents;

(v) Expenses for food, housing, clothing and transportation;

(vi) Medical expenses; and

(vii) Exceptional expenses, if any.

(2) If an OPM employee requests a special review under this section, the employee shall file an alternative proposed offset or payment schedule and a statement, with supporting documents (§ 179.211(b)), stating why the current salary offset or payments result in an extreme financial hardship to the employee.

(c) The Director shall evaluate the statement and supporting documents, and determine whether the original offset or repayment schedule imposes an extreme financial hardship on the employee. The Director shall notify the employee in writing of such determination, including, if appropriate, a revised offset or repayment schedule.

(d) If the special review results in a revised offset or repayment schedule, the OPM salary offset coordinator shall provide a new certification to the paying agency.

§ 179.211 Notice of salary offset.

(a) Upon receipt of proper certification from a creditor agency, the OPM payroll office will send the OPM employee, identified in the certification as the debtor, a written notice of salary offset. Such notice shall, at a minimum:

(1) State that OPM has received a properly certified debt claim from a creditor agency;

(2) Contain a copy of the certification received from the creditor agency;

(3) Advise the employee that salary offset will be initiated at the next officially established pay interval; and

(4) State the amount of the claim and amount of deductions.

(b) The payroll office shall provide a copy of the notice to the creditor agency and advise such agency of the dollar amount to be offset and the pay period when the offset will begin.

§ 179.212 Procedures for salary offset.

(a) The Director shall coordinate salary deductions under this subpart.

(b) OPM payroll office shall determine the amount of an employee's disposable pay and implement the salary offset.

(c) Deductions shall begin effective the pay period following receipt by OPM's payroll office of proper certification of the debt (§ 179.208).

(d) *Types of collection.*

(1) *Lump-sum payment.* A debt will be collected in a lump sum if possible. If an employee is financially unable to pay in one lump sum or the amount of the debt exceeds 15 percent of disposable pay for an officially established pay interval, collection must be made in installments.

(2) *Installment deductions.* Installment deductions will be made over a period not greater than the anticipated period of employment and, except in rare circumstances, not to exceed 3 years. The size and frequency of installment deductions will bear a reasonable relation to the size of the debt and the employee's ability to pay. The amount deducted for any period will not exceed 15 percent of the disposable pay from which the deduction is made unless the employee has agreed in writing to the deduction of a greater amount.

(3) *Lump-sum deductions from final check.* A lump-sum deduction exceeding the 15 percent disposable pay limitation may be made from any final salary payment pursuant to 31 U.S.C. 3716 in order to liquidate the debt, whether the employee is being separated voluntarily or involuntarily.

(4) *Lump-sum deductions from other sources.* When an employee subject to salary offset is separated from OPM and the balance of the debt cannot be liquidated by offset of the final salary check, the Office, pursuant to 31 U.S.C. 3716, the FCCS and OPM's implementing regulations, may offset the balance of the debt against any financial payment due the employee from the U.S. Government.

(e) *Multiple debts.* In instances where two or more creditor agencies are seeking salary offset, or where two or more debts are owed to a single creditor agency, OPM payroll office may, at its discretion, determine whether one or more debts should be offset simultaneously within the 15 percent limitation.

(f) *Precedence of debts owed to OPM.* For OPM employees, debts owed to the Office generally take precedence over debts owed to other agencies. In the event that a debt to the Office is certified while an employee is subject to a salary offset to repay another agency, the OPM payroll office may decide whether to have that debt repaid in full before collecting its claim or whether changes should be made in the salary deduction being sent to the other agency. If debts owed the Office can be collected in one pay period, the payroll office may suspend the salary offset to the other agency for that pay period in order to liquidate the Office debt.

(g) When an employee owes two or more debts, the best interests of the Government shall be the primary consideration in determining the order of debt collection. The OPM payroll office, in making this determination, will be guided primarily by the statute of limitations that affects the collection of the debt(s).

§ 179.213 Coordinating salary offset with other agencies.

(a) *Responsibility of OPM as the creditor agency.*

(1) The Director shall coordinate debt collections with other agencies and shall, as appropriate:

(i) Arrange for a hearing or special review upon proper petitioning by the employee; and

(ii) Prescribe, upon consultation with the General Counsel, such additional practices and procedures as may be necessary to carry out the intent of this subpart.

(2) The designated salary offset coordinator will be responsible for:

(i) Ensuring that each notice of intent to offset is consistent with the requirements of § 179.206;

(ii) Ensuring that each certification of debt that is sent to a paying agency is

consistent with the requirements of § 179.208;

(iii) Obtaining hearing officials from other agencies pursuant to § 179.207(f); and

(iv) Ensuring that hearings are properly scheduled.

(3) *Requesting recovery from current paying agency.* Upon completion of the procedures established in the regulations in this subpart and pursuant to 5 U.S.C. 5514, the Office must:

(i) Certify, in writing, that the employee owes the debt, the amount and basis of the debt, the date on which payment(s) is due, the date the Government's right to collect the debt first accrued, and that the Office regulations implementing 5 U.S.C. 5514 have been approved by the Office of Personnel Management;

(ii) Advise the paying agency of the amount or percentage of disposable pay to be collected in each installment and the number and commencing date of the installments (if a date other than the next officially established pay period is required);

(iii) Advise the paying agency of the action(s) taken under 5 U.S.C. 5514(b) and give the date(s) the action(s) was taken (unless the employee has consented to the salary offset in writing or signed a statement acknowledging receipt of the required procedures and the written consent or statement is forwarded to the paying agency);

(iv) Except as otherwise provided in this paragraph (a)(3), submit a debt claim certification containing at a minimum the information specified in paragraphs (a)(3)(i), (a)(3)(ii) and (a)(3)(iii) of this section and an installment agreement (or other instruction on the payment schedule), if applicable, to the employee's paying agency.

(v) If the employee is in the process of separating, and the employee has not received a final salary check, or other final payment(s) from the paying agency, submit the debt claim, as provided in § 179.208, to the employee's paying agency for collection. The paying agency must certify the total amount of its collection on the debt and send a copy of the certification to the employee and other copy to the Office. If the paying agency's collection does not fully satisfy the debt, and the paying agency is aware that the debtor is entitled to payments from the Civil Service Retirement and Disability Fund or other similar payments that may be due the debtor employee from other Federal Government sources, the paying agency will provide written notification of the outstanding debt to the agency responsible for making such other payments to the debtor employee. The written notification shall state that the employee owes a debt (including the amount) and that the provisions of this section have been fully complied with. Before the collection can be made by the other paying organization, the Office must submit a properly certified claim to the agency responsible for making such other payment(s).

(vi) If the employee is already separated and all payments due from his or her former paying agency have been paid, the Office may request, unless otherwise prohibited, that money due and payable to the employee from the Civil Service Retirement and Disability Fund (5 CFR part 831) or other similar funds, be administratively offset to collect the debt (31 U.S.C. 3716 and the FCCS).

(4) *Employee transfer.* When an employee transfers from one paying agency to another paying agency, the Office is not required to repeat the due process procedures described in 5 U.S.C. 5514 and this subpart to resume the collection. The Office will submit a properly certified claim to the new paying agency will subsequently review the debt to make sure the collection is resumed by the new paying agency.

(b) *Responsibility of the Office as the paying agency.*

(1) *Complete claim.* When the Office receives a certified claim from a creditor agency, deductions should be scheduled to begin at the next officially established pay interval. Before deductions can begin, the employee must receive written notice from the Office including:

(i) A statement that the Office has received a certified debt claim from the creditor agency;

(ii) The amount of the debt claim;

(iii) The date salary offset deductions will begin, and

(iv) The amount of such deductions.

(2) *Incomplete claim.* When the Office receives an incomplete certification of debt from a creditor agency, the Office must return the debt claim with notice that procedures under 5 U.S.C. 5514 and this subpart must be followed and a properly certified debt claim received before action will be taken to collect from the employee's current pay account.

(3) *Review.* The Office is not authorized to review the merits of the creditor agency's determination with respect to the amount or validity of the debt certified by the creditor agency.

(4) *Employees who transfer from one paying agency to another.* If, after the creditor agency has submitted the debt claim to the Office, the employee transfers from OPM to a different paying agency before the debt is collected in full, the office will certify the total amount collected on the debt. One copy of the certification will be furnished to the employee and one copy to the creditor agency along with notice of the employee's transfer.

§ 179.214 Interest, penalties and administrative costs.

The Office shall assess interest, penalties and administrative costs on debts owed pursuant to 31 U.S.C. 3717 and 4 CFR part 101. Penalties and administrative costs will be assessed on all delinquent debts.

(a) In cases of default on a previous repayment agreement, the Office reserves the right to set a new interest rate which reflects the current value of funds to the Treasury at the time a new repayment agreement is executed.

(b) The Office, on a case-by-case basis, may waive all interest accrued on debts paid in full within 60 days of the due date if there is no indication of fault or lack of good faith on the part of the debtor.

(c) The Office may waive, in whole or in part, the collection of interest, penalties, and/or administrative costs assessed under this section under the criteria specified in 4 CFR, Chapter II, part 103 relating to the compromise of claims (without regard to the amount of the debt).

(d) The Office may waive, in whole or in part, the collection of interest, penalties, and/or administrative costs assessed under this section if the Office determines that collection of these charges would be against equity and good conscience or not in the best interests of the United States.

(e) The Office shall waive the accrual of interest pending consideration of a request for reconsideration, administrative review, or waiver of the underlying debt under provisions of a permissive statute providing for such review related to the debt.

(f) The Office shall waive interest on repayment agreements when the amount of interest accruing equals or exceeds the amount of installments the debtor can reasonably afford and there is no indication of fault or lack of good faith on the part of the debtor.

§ 179.215 Refunds.

(a) The Office shall promptly refund any amounts deducted under the authority of 5 U.S.C. 5514 when:

(1) The debt is waived or otherwise found not to be owing the United States (unless expressly prohibited by statute or regulation); or

(2) An administrative or judicial order directs the Office to make a refund.

(b) Unless required or permitted by law or contract, refunds under this subpart shall not bear interest.

§ 179.216 Request for the services of a hearing official when the creditor agency agency is not OPM.

(a) The Office will provide a hearing official upon request of the creditor agency when the debtor is employed by the Office and the creditor agency cannot provide a prompt and appropriate hearing before a hearing official furnished pursuant to another lawful arrangement.

(b) The salary offset coordinator will secure qualified personnel to serve as hearing officials.

(c) Services rendered under this section will be provided on a fully reimbursable basis pursuant to the Economy Act of 1932, *as amended*, 31 U.S.C. 1535.

§ 179.217 Non-waiver of rights by payments.

An employee's involuntary payment of all or any portion of a debt being collected under this subpart must not be construed as a waiver of any rights which the employee may have under 5 U.S.C. 5514 or any other provision of contract or law unless there are statutory or contractual provisions to the contrary.

§ 179.218 Additional administrative collection action.

Nothing contained in this subpart is intended to preclude the use of any other administrative remedy which may be available.

[FR Doc. 93–28411 Filed 11–18–93; 8:45 am]

BILLING CODE 6325-01-M

DEPARTMENT OF AGRICULTURE

Commodity Credit Corporation

7 CFR Part 1430

RIN 0560–AD51

Amendments to the Regulations Governing Reductions in the Price of Milk Marketed by Producers Required by the Omnibus Budget Reconciliation Act of 1993

AGENCY: Commodity Credit Corporation, USDA.

ACTION: Final rule.

SUMMARY: This final rule implements a reduction in the price received by producers for milk produced in the United States for all milk marketed by producers for commercial use for the calendar years 1996 and 1997, and a temporary adjustment to the current reduction in the price received by producers if the Food and Drug Administration (FDA) approves an application with respect to the use of bovine growth hormone (BGH). These amendments are required by section 204(h) of the Agricultural Act of 1949 (1949 Act), as amended by section 1105 of the Omnibus Budget Reconciliation Act of 1993 (the 1993 Budget Act), and by free-standing provisions of that section of the 1993 Budget Act. The reduction for the calendar years 1996 and 1997 shall be 10 cents per hundredweight. This reduction rate is subject to an increase each May 1 of those years by the amount needed to compensate for refunds of assessments under section 204 of the 1949 Act to producers of the previous year's reduction. As for BGH, a 10-percent decrease in the current amount of reduction in the price received by producers will be made for the 90-day period after the FDA first approves a BGH application.

EFFECTIVE DATE: November 1, 1993.

FOR FURTHER INFORMATION CONTACT: Charles Shaw, Dairy Analysis Division, Agricultural Stabilization and Conservation Service, United States Department of Agriculture (USDA), P.O. Box 2415, Washington, DC 20013–2415; telephone 202–720–6733.

SUPPLEMENTARY INFORMATION:

Background

The Omnibus Budget Reconciliation Act of 1990 added section 204(h) of the 1949 Act requiring the Secretary of Agriculture to provide for reductions in producer proceeds from milk marketed for commercial use, beginning January 1, 1991. The 1949 Act provided reductions of 5 cents per hundredweight for 1991 and 11.25 cents per hundredweight for the calendar years 1992 through 1995. The 1993 Budget Act amended section 204(h) to provide for reductions of 10 cents per hundredweight for the calendar years 1996 and 1997. As with the calendar year 1992 through 1995 reductions, the reductions for 1996 and 1997 will be increased on May 1 of each year to compensate for refunds by the Commodity Credit Corporation (CCC) to qualifying producers of reductions from the previous year. The 1993 Budget Act also provided for a 10-percent decrease in the amount of the current reduction in producer proceeds under section 204 of the 1949 Act for a 90-day period after the FDA first approves an application with respect to the use of BGH. The reductions apply to all milk produced in the area encompassed by the contiguous states of the United States and the District of Columbia.

The regulations governing reductions in the price of milk marketed by producers are amended in this rule to implement the provisions described above and make related conforming amendments and minor technical corrections.

Administrative Procedure Act (5 U.S.C. 553) and Executive Order 12866

Section 101(b) of the Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA) provides that 5 U.S.C. 553 shall not apply to the implementation of milk proceeds reductions under section 204 of the 1949 Act. In addition, the subject matter of this rule is required by statute, with no possibility of divergence from the statutory mandate. Therefore, a notice of proposed rulemaking and opportunity for public comment are not needed.

This final rule is issued in conformance with Executive Order 12866. Based on information compiled by the Department, it has been determined that this final rule: (1) Would have an annual effect on the economy of less than $100 million; (2) would not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (3) would not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (4) would not alter the budgetary impact of entitlements, grants, user fees, or loan programs or rights and obligations of recipients thereof; and (5) would not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or principles set forth in Executive Order 12866.

Executive Order 12778

This final rule has been reviewed in accordance with Executive Order 12778, Civil Justice Reform. The provisions of the rule do not preempt state laws, are not retroactive, and do not involve administrative appeals.

Executive Order 12372

This program/activity is not subject to the provisions of Executive Order 12372 which requires intergovernmental consultation with State and local officials. See Notice related to 7 CFR part 3015, subpart V, published at 48 FR 29115 (June 24, 1983).

Regulatory Flexibility Act

It has been determined that the Regulatory Flexibility Act (Pub. L. 96–

354) is not applicable to this rule because the CCC is not required by 5 U.S.C. 553 or any other provision of law to publish a notice of proposed rulemaking with respect to the subject matter of this rule.

Environmental Evaluation

It has been determined by an environmental evaluation that this rule will have no significant adverse impact on the quality of the human environment. Therefore, neither an environmental assessment nor environmental impact statement is needed.

Federal Assistance Program

The title and number of the Federal Assistance Program to which this rule applies, as found in the Catalog of Federal Domestic Assistance are: Commodity Loans and Purchases—10.051.

Paperwork Reduction Act

The purpose of the amendments at 7 CFR part 1430 is to implement new assessment rates. These changes do not impact the content of the reporting requirements, the frequency of reporting, or the method of reporting from those that are currently required by the regulations governing reductions in the price of milk marketed by producers. The Office of Management and Budget (OMB) has approved the information collection requirements contained in the current regulations through June 30, 1994, under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and assigned OMB number 0560–0126.

List of Subjects in 7 CFR Part 1430

Dairy products, Fraud, Penalties, Price support program, Reporting and recordkeeping requirements.

Accordingly, 7 CFR part 1430 is amended as follows:

PART 1430—DAIRY PRODUCTS

1. The authority citation for 7 CFR part 1430 is revised to read as follows:

Authority: Sec. 1105, Public Law 103–66; 7 U.S.C. 1446; 15 U.S.C. 714b and 714c.

2. The subpart heading which reads "Regulations Governing Reductions in the Price of Milk Marketed by Producers, January 1, 1991 to December 31, 1995" is revised to read "Regulations Governing Reductions in the Price of Milk Marketed by Producers, January 1, 1991, to December 31, 1997".

3. Section 1430.340 is amended by revising paragraphs (a), (b)(1), (b)(2), (b)(4), (b)(5), and (d) to read as follows:

§ 1430.340 General statement.

(a) *Purpose.* This subpart implements the provisions of section 204 of the Agricultural Act of 1949 as amended and affected by section 1105(g)(3) of the Omnibus Budget Reconciliation Act of 1990 and sections 1105(a)(4) and 1105(c) of the Omnibus Budget Reconciliation Act of 1993, under which the Secretary of Agriculture is required to provide for a reduction in the price received by producers for all milk produced in the United States and marketed by producers for commercial use during the calendar years 1991 through 1997.

(b) * * *

(1) The amount of the price reduction shall be 5 cents per hundredweight of milk marketed by producers for commercial use in 1991 and, except as provided by the provisions of paragraph (b)(2) of this section, 11.25 cents per hundredweight of milk marketed by producers for commercial use in the calendar years 1992 through 1995 and 10 cents per hundredweight of milk marketed by producers for commercial use in the calendar years 1996 and 1997.

(2) On or before May 1 of each of the calendar years 1992 through 1997, the amount of reduction per hundredweight for each such year shall be adjusted individually for the remainder of the relevant year to compensate for refunds of price reductions made in the preceding calendar year which were collected by CCC under this subpart. The adjustment shall be announced by the Secretary by the required date.

* * * * *

(4) The reductions provided for in paragraphs (b)(1) and (b)(2) of this section shall be made and remitted to the CCC in the manner prescribed in § 1430.343 of these regulations.

(5) In addition, the CCC may make provision for the refund of monies collected in those cases in which the monies were collected for milk marketings later excluded by statutory amendment from coverage of this subpart for any of the calendar years 1992 through 1997.

* * * * *

(d) *Applicability.* The provisions of this subpart shall apply to all milk produced in the United States that is marketed for commercial use by producers during the calendar years beginning on January 1, 1991, and ending December 31, 1997.

4. Section 1430.341 is amended by:

A. Redesignating paragraph (i) as paragraph (k), and redesignating paragraphs (j) through (w) as paragraphs (m) through (z), respectively,

B. Redesignating paragraphs (d) through (h) as paragraphs (e) through (i), respectively,

C. Adding a new paragraph (d),

D. Adding new paragraphs (j) and (l), and

E. Revising newly designated paragraph (u)(1) and the introductory text of newly redesignated paragraph (x) to read as follows:

§ 1430.341 Definitions.

* * * * *

(d) *Bovine growth hormone* means a synthetic growth hormone produced through the process of recombinant DNA techniques that is intended for use in bovine animals.

* * * * *

(j) *Date of FDA BGH approval* means the date the FDA pursuant to authority under section 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b), first approves an application with respect to the use of BGH.

* * * * *

(l) *FDA* means the Food and Drug Administration.

* * * * *

(u) *Responsible person* means:

(1) Any person who pays, or who is contractually or otherwise required to pay, a producer or producer's successor for milk marketed by a producer for commercial use, except to the extent that the producer of the milk is the responsible person under paragraph (u)(2) of this section; Provided, that the responsible persons under this paragraph shall include, but are not limited to, handlers of milk, including a handler regulated under a Federal milk order to the extent of, but not limited to, milk for which payments are transmitted by the handler to a Market Administrator under such an order for transmittal by the Market Administrator to individual producers; and

* * * * *

(x) United States means, except with respect to paragraphs (k), (v), and (y) of this section, the following:

* * * * *

5. Section 1430.343 is amended by:

A. Revising paragraph (a)(2),

B. Redesignating paragraph (a)(3) as (a)(5) and revising newly designated (a)(5), and

C. Adding paragraphs (a)(3) and (a)(4) to read as follows:

§ 1430.343 Required reductions and remittances.

(a) * * *

(2) Except as provided by the provisions of paragraph (a)(5) of this section, a reduction of eleven and twenty-five hundredths (11.25) cents

per hundredweight shall be made in the price received by producers for all milk produced in the United States and marketed by producers for commercial use during the period beginning on January 1, 1992, and ending December 31, 1995.

(3) Except as provided by the provisions of paragraph (a)(5) of this section, a reduction of ten (10.00) cents per hundredweight shall be made in the price received by producers for all milk produced in the United States and marketed by producers for commercial use during the period beginning on January 1, 1996, and ending December 31, 1997.

(4) The reductions specifically provided for in paragraphs (a)(2), (a)(3) and (a)(5) of this section with respect to the price received by producers for all milk produced in the United States and marketed by producers for commercial use during the period beginning on January 1, 1992, and ending December 31, 1997, shall, as appropriate, be reduced by ten percent during the period beginning on the date of FDA BGH approval and ending 90 days after the date of such approval.

(5) For each of the calendar years 1992 through 1997, the reductions as specifically provided for in paragraphs (a)(2) and (a)(3) of this section, with respect to marketings of milk for commercial use in those respective years, shall be increased on, or before, May 1 of the year for the remainder of the year by an amount per hundredweight of milk that is necessary in order to compensate for refunds made to producers of milk for price reductions collected under this subpart on milk marketed for the immediately preceding calendar year.

* * * * *

6. Section 1430.344(a) is revised to read as follows:

§ 1430.344 Refunds—General provisions for eligibility and other requirements.

(a) A refund of a reduction in producer proceeds made under this subpart may be made only to the extent explicitly provided for in this subpart. Such refunds may be made only for milk marketed by producers in the calendar years 1991 through 1997. The monies that may be refunded to a person shall include only the reductions in proceeds of that person as provided for in § 1430.343(a) pursuant to provisions of the Omnibus Budget Reconciliation Act of 1990 and the Omnibus Budget Reconciliation Act of 1993.

* * * * *

Signed at Washington DC, on November 12, 1993.

Grant Buntrock,

Acting Executive Vice President, Commodity Credit Corporation.

[FR Doc. 93–28464 Filed 11–18–93; 8:45 am]

BILLING CODE 3410–05–P

Rural Electrification Administration

7 CFR Part 1755

RIN 0572–AA57

Specification for Filled Buried Wires

AGENCY: Rural Electrification Administration, USDA.

ACTION: Final rule.

SUMMARY: The Rural Electrification Administration (REA) amends its regulations on Telecommunications Standards and Specifications for Materials, Equipment and Construction, by rescinding REA Bulletin 345–86, REA Specification for Filled Buried Service Wire, PE–86, and codifying this specification. This revised specification: Allows the use of 24 AWG conductor sizes; allows 3 pair wire design; includes raw material requirements for insulating and jacketing compounds; and establishes end product requirements associated with the options stated above.

EFFECTIVE DATE: December 20, 1993. Incorporation by reference of certain publications listed in this final rule is approved by the Director of the Federal Register as of December 20, 1993.

FOR FURTHER INFORMATION CONTACT: Garnett G. Adams, Chief, Outside Plant Branch, Telecommunications Standards Division, Rural Electrification Administration, room 2844, South Building, U.S. Department of Agriculture, Washington, DC 20250–1500, telephone number (202) 720–0667.

SUPPLEMENTARY INFORMATION:

Executive Order 12291

This final rule has been issued in conformance with Executive Order 12291 and Departmental Regulation 1512–1. This action has been classified as "nonmajor" because it does not meet the criteria for a major regulation as established by the Order.

Executive Order 12778

This final rule has been reviewed under Executive Order 12778, Civil Justice Reform. If adopted, this final rule will not:

(1) Preempt any State or local laws, regulations, or policies;

(2) Have any retroactive effect; and

(3) Require administrative proceedings before parties may file suit challenging the provisions of this rule.

Regulatory Flexibility Act Certification

The Administrator of REA has determined that this final rule will not have a significant economic impact on a substantial number of small entities as defined in the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) because most borrowers of REA loan funds do not meet the requirements for small entities. Further, the regulations are applied equally to all borrowers.

Information Collection and Recordkeeping Requirements

In compliance with the Office of Management and Budget (OMB) regulations (5 CFR part 1320) which implements the Paperwork Reduction Act of 1980 (Pub. L. 96–511) and section 3504 of that Act, information collection and recordkeeping requirements contained in this final rule have been approved by OMB under control number 0572–0077 which expires on January 31, 1994. Comments concerning these requirements should be directed to the office of Information and Regulator Affairs of OMB, Attention: Desk Officer for USDA, room 3201, New Executive Office Building, Washington, DC 20503.

National Environmental Policy Act Certification

The Administrator of REA has determined that this final rule will not significantly affect the quality of the human environment as defined by the National Environmental Policy Act of 1969 (42 U.S. C. 4321 *et seq.*). Therefore, this action does not require an environmental impact statement or assessment.

Catalog of Federal Domestic Assistance

The program described by this final rule is listed in the Catalog of Federal Domestic Assistance programs under No. 10.851, Rural Telephone Loans and Loan Guarantees, and No. 10.852, Rural Telephone Bank Loans. This catalog is available on a subscription basis from the Superintendent of Documents, the United States Government Printing Office, Washington, DC 20402.

Executive Order 12372

This final rule is excluded from the scope of Executive Order 12372, Intergovernmental Consultation that requires intergovernmental consulation with state and local officials. A Notice of Final rule titled Department Programs and Activities Excluded from Executive Order 12372 (50 FR 47034) exempts

REA and RTB loans and loan guarantees, and RTB bank loans, to governmental and nongovernmental entities from coverage under this Order.

Background

REA issues publications titled "Bulletin" which serve to guide borrowers regarding already codified policy, procedures, and requirements needed to manage loans, loan guarantee programs, and the security instruments which provide for and secure REA financing. REA issues standards and specifications for the construction of telephone facilities financed with REA loan funds. REA is rescinding Bulletin 345–86, REA Specification for Filled Buried Service Wire, PE–86, and codifying this specification at 7 CFR 1755.860, REA Specification for Filled Buried Wires.

Filled buried service wire is used in outside plant by REA telephone borrowers as a physical transport medium for voice and data. The current specification limits to 2 pair and to 22 gauge the number of pairs and the size conductor of filled buried wire that can be supplied by wire manufacturers for installation by REA borrowers. Limitations are placed on the wire because of a decision by REA to restrict the application of this type wire exclusively to buried subscriber drops, and, thereby, force REA borrowers to install 6 pair cable for all small pair count distribution applications.

The use of 6 pair cables as distribution cables in sparsely populated exchanges has resulted in higher economic costs. The revised specification will allow the use of 24 AWG conductors and 3 pairs of conductors which will permit the revised wire designs to be used both as buried subscriber drops and small pair count distribution wires. This revision should eliminate the high cost associated with 6 pair cables.

The current specification does not include insulation and jacketing requirements, because these requirements were previously covered by REA Bulletins 345–21 and 345–51, both of which have since been rescinded. Therefore, revision of the current specification is necessary to incorporate essential jacketing and insulation requirements. By incorporating the requirements which were formerly found in REA Bulletins 345–21 and 345–51 into 7 CFR 1755.860, a comprehensive document will be published for the manufacture of filled buried wire products.

The current specification includes only end product requirements associated with filled buried wire usage as a buried subscriber drop. Since the revised specification will allow this type of wire to also be used as distribution wire, additional end product requirements have been included to assure a quality product for this application.

This action establishes REA requirements for a wider range of filled buried wires without affecting current designs or manufacturing techniques. This widened selection of wires will afford REA telephone borrowers the opportunity to increase subscriber services in an economical and efficient manner through enhanced wire designs brought about by technological advancements made during the past eleven years.

Comments

On December 31, 1992, REA published a proposed rule (57 FR 62490) to rescind REA Bulletin 345–86, REA Specification for Filled Buried Service Wire, PE-86, and to codify the revised specification at 7 CFR 1755.860, REA Specification for Filled Buried Wires. Comments on this proposed rule were due by February 1, 1993. Comments and recommendations were received from several companies by this due date. The comments, recommendations, and responses are summarized as follows:

One respondent commented that the shielding thickness tolerance for the Copper Alloy 664 shield should be changed from ± 0.00508 mm (± 0.0002 in.) to ± 0.0127 mm (± 0.0005 in.).

Response: The American National Standards Institute/Insulated Cable Engineers Association (ANSI/ICEA) S-86–634–1991, Standard for Buried Distribution and Service Wire, uses the same Copper Alloy 664 shielding material as specified in 7 CFR 1755.860 except that the ANSI/ICEA standard allows the ± 0.0127 mm (± 0.0005 in.) tolerance. If 7 CFR 1755.860 maintains the ± 0.00508 mm (± 0.0002 in.) tolerance limit for the Copper Alloy 664 shield, REA would force shielding tape manufacturers to institute tighter processing controls to assure that the ± 0.00508 mm (± 0.0002 in.) tolerance limit is met and also force manufacturers to maintain two inventories of the Copper Alloy 664 shield material because of the different tolerance limits specified in the two specifications for the identical product. It would also force manufacturers who produce buried wire using this shield type to both the REA specification and the ANSI/ICEA standard to maintain two separate wire inventories for this product based solely on the tolerance differences between the two specifications. All of the above in turn would result in high material prices to wire manufacturers and higher wire prices to REA borrowers. By changing the Copper Alloy 664 shielding tolerance limit from ± 0.00508 mm (± 0.0002 in.) to ± 0.0127 mm (± 0.0005 in.) in 7 CFR 1755.860, REA would reduce the material costs of this wire to wire manufacturers by allowing the Copper Alloy 664 shielding tape suppliers to eliminate the need for special processing controls and the maintain of separate inventories for the same shield material. This change would also reduce the wire costs to REA borrowers by allowing wire manufacturers to reduce their inventory costs for buried wires using the Copper Alloy 664 shielding material because the 7 CFR 1755.860 material requirements would be identical to the ANSI/ICEA standard material requirements for the Copper Alloy 664 shield. Therefore, REA will change the Copper Alloy 664 shielding tolerance limit from ± 0.00508 mm (± 0.0002 in.) to ± 0.0127 mm (± 0.0005 in.) in 7 CFR 1755.860.

Two respondents commented that a 4 mil Copper Alloy 220 (Bronze) tape should be added to the specification as an optional shielding material for buried wires used in nongopher areas.

Response: The 4 mil Copper Alloy 220 (Bronze) shield was allowed as an acceptable buried wire shielding material for nongopher areas in the cancelled REA Specifications PE-50 and PE-54 from 1966 through 1982. During this time period, buried wires using the 4 mil Copper Alloy 220 (Bronze) shielding material provided satisfactory field service to REA borrowers. Because the 4 mil Copper Alloy 220 (Bronze) shield has a proven history of satisfactory field service, REA will add the 4 mil Copper Alloy 220 (Bronze) shield material for nongopher areas to 7 CFR 1755.860.

One respondent commented that the inner jacket now required for all filled buried wires designs specified in 7 CFR 1755.860 should be made optional for filled buried wire designs installed in nongopher areas.

Response: The current issue of REA Bulletin 345–86, which will be replaced by 7 CFR 1755.860, does not require the use of an inner jacket for filled buried service wire designs. It was the decision of REA in 1982 that single jacketed filled buried service wires covered by REA Bulletin 345–86 could withstand the rigors of installation for lengths not to exceed 500 feet. Since 1982 the use of the single jacketed filled buried service wires by REA borrowers for lengths not to exceed 500 feet has been virtually nonexistent because the field

experience of the single jacketed design indicated that the wire could not withstand the rigors of installation. Because of negligible field experience with single jacketed buried service wires over a maximum installation length of 500 feet and the knowledge that 7 CFR 1755.860 would cover filled buried wires for service drop and/or distribution usage over extremely long installation lengths, REA decided that the filled buried wire designs covered by 7 CFR 1755.860 would require a double jacketed design to withstand the rigors of installation over these long lengths. Because the use of an inner jacket will add to the strength of these wire designs to withstand the stresses of installation over long lengths in nongopher and gopher areas, REA will not change 7 CFR 1755.860 to allow the option to provide single jacketed filled buried wires for installation in nongopher areas.

One respondent recommend that the attenuation requirements presently specified at a frequency of 150 kilohertz in 7 CFR 1755.860 be changed to a frequency of 772 kilohertz, and that the attenuation at a frequency of 150 kilohertz be allowed as an alternative test requirement.

Response: The filled buried wires covered by 7 CFR 1755.860 have been designed to provide REA borrowers with voice frequency and subscriber carrier grades of telecommunication transmission. To assure reliable voice frequency transmission, all electrical requirements pertaining to voice frequency transmission in 7 CFR 1755.860 are specified at a frequency of 1 kilohertz. To assure reliable subscriber carrier transmission, all electrical requirements pertaining to subscriber carrier transmission in 7 CFR 1755.860 are specified at a frequency of 150 kilohertz. The subscriber carrier electrical requirements in 7 CFR 1755.860 were specified at a frequency of 150 kilohertz because this is the operational frequency of subscriber carrier systems. Since the attenuation at a frequency of 150 kilohertz is one the important parameters in the designing subscriber carrier systems for use on this wire, REA will not change the 150 kilohertz attenuation requirement presently specified in 7 CFR 1755.860 to 772 kilohertz as recommended by the commentator.

One respondent commented that the print accuracy requirement in 7 CFR 1755.860 be changed from +1 percent, −0 percent to ± .1 foot over a 2 foot length of wire.

Response: The +1 percent, −0 percent print accuracy requirement in 7 CFR 1755.860 is the same print accuracy requirement as specified in REA Bulletin 345–86. Since manufacturers have been producing wires manufactured in accordance with REA Bulletin 345–86 for more than 11 years with a print accuracy requirement of +1 percent, −0 percent without any difficulties, REA will not change the print accuracy requirement specified in 7 CFR 1755.860 to print accuracy requirement recommended by the commentator.

One respondent commented that a 6 mil plastic coated steel tape should be allowed as an optional gopher resistant shield in 7 CFR 1755.860.

Response: REA has used the 6 mil plastic coated steel tape as a gopher resistant shield on filled buried copper and filled buried fiber optic cables for many years with satisfactory field performance, but its use as a gopher resistant shield for filled buried wires of 3 pairs or less would be a new application. In addition, REA accepted shield bond connectors used for bonding and grounding filled buried service wire shields in pedestals and at station protectors have never been tested using the 6 mil plastic coated steel shield to determine compliance with the shield bonding connector requirements specified in REA Bulletin 345–65, REA Specification for Shield Bonding Connectors, PE-33. Until filled buried wires of 3 pairs or less using the 6 mil plastic coated steel shield gains field experience to assure reliable service, and the REA accepted filled buried wire shield bond connectors are tested to determine compliance with the requirements of REA Bulletin 345–65 using the 6 mil plastic coated steel shield, REA will not change 7 CFR 1755.860 to allow its use as an optional gopher resistant shield.

List of Subjects in 7 CFR Part 1755

Incorporation by reference, Loan programs—communications, Reporting and recordkeeping requirements, Rural areas, Telephone.

For reasons set out in the preamble, REA amends 7 CFR part 1755 as follows:

PART 1755—TELECOMMUNICATIONS STANDARDS AND SPECIFICATIONS FOR MATERIALS, EQUIPMENT AND CONSTRUCTION

1. The authority citation for Part 1755 continues to read as follows:

Authority: 7 U.S.C. 901 *et seq.*, 1921 *et seq.*

§ 1755.97 [Amended]

2. Section 1755.97 is amended by removing the entry REA Bulletin 345–86 from the table.

3. Section 1755.860 is added to read as follows:

§ 1755.860 REA specification for filled buried wires.

(a) *Scope.* (1) This section covers the requirements for filled buried wires intended for direct burial as a subscriber drop and/or distribution wire.

(i) The conductors are solid copper, individually insulated with an extruded solid insulating compound.

(ii) The insulated conductors are twisted into pairs (a star-quad configuration is permitted for the two pair wires) which are then stranded or oscillated to form a cylindrical core.

(iii) A moisture resistant filling compound is applied to the stranded conductors completely covering the insulated conductors and filling the interstices between the pairs.

(iv) The wire structure is completed by the application of an optional core wrapping material, an inner jacket, a flooding compound, a shield, a flooding compound, and an overall plastic jacket.

(2) The number of pairs and gauge size of conductors which are used within the REA program are provided in the following table:

American Wire Gauge (AWG)	22	24
Pairs	2	2
	3	3

(3) All wires sold to REA borrowers for projects involving REA loan funds under this section must be accepted by REA Technical Standards Committee "A" (Telephone). For wires manufactured to the specification of this section, all design changes to an accepted design must be submitted for acceptance. REA will be the sole authority on what constitutes a design change.

(4) Materials, manufacturing techniques, or wire designs not specifically addressed by this section may be allowed if accepted by REA. Justification for acceptance of modified materials, manufacturing techniques, or wire designs must be provided to substantiate product utility and long term stability and endurance.

(5) The American National Standards Institute/Electronic Industries Association (ANSI/EIA) 359-A-84, EIA Standard Colors for Color Identification and Coding, referenced in this section is incorporated by reference by REA. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of ANSI/EIA 359-A-84 are available for inspection during normal business hours at REA, room 2845, U.S

Department of Agriculture, Washington, DC 20250–1500 or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Copies are available from EIA, 2001 Pennsylvania Avenue, NW., suite 900, Washington, DC 20006, telephone number (202) 457–4966.

(6) American Society for Testing and Materials specifications (ASTM) A 505–87, Standard Specification for Steel, Sheet and Strip, Alloy, Hot-Rolled and Cold-Rolled, General Requirements for; ASTM B 3–90, Standard Specification for Soft or Annealed Copper Wire; ASTM B 193–87, Standard Test Method for Resistivity of Electrical Conductor Materials; ASTM B 224–91, Standard Classification of Coppers; ASTM B 694–86, Standard Specification for Copper, Copper Alloy, and Copper-Clad Stainless Steel Sheet and Strip for Electrical Cable Shielding; ASTM D 150–87, Standard Test Methods for A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulating Materials; ASTM D 257–91, Standard Test Methods for D-C Resistance or Conductance of Insulating Materials; ASTM D 1238–90b, Standard Test Method for Flow Rates of Thermoplastics by Extrusion Plastometer; ASTM D 1248–84(1989), Standard Specification for Polyethylene Plastics Molding and Extrusion Materials; ASTM D 1535–89, Standard Test Method for Specifying Color by the Munsell System; ASTM D 3349–86, Standard Test Method for Absorption Coefficient of Carbon Black Pigmented Ethylene Plastic; ASTM D 4101–82(1988), Standard Specification for Propylene Plastic Injection and Extrusion Materials; ASTM D 4565–90a, Standard Test Methods for Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable; ASTM D 4566–90, Standard Test Methods for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable; ASTM D 4568–86, Standard Test Methods for Evaluating Compatibility between Cable Filling and Flooding Compounds and Polyolefin Cable Materials; ASTM D 4872–88, Standard Test Method for Dielectric Testing of Wire and Cable Filling Compounds; ASTM E 8–91, Standard Test Methods of Tension Testing of Metallic Materials; and ASTM E 29–90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications, referenced in this section are incorporated by reference by REA. These incorporations by references were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the ASTM standards are available for inspection during normal business hours at REA, room 2845, U.S. Department Agriculture, Washington, DC 20250–1500 or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Copies are available from ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103–1187, telephone number (215) 299–5585.

(b) *Conductors and conductor insulation.* (1) Each conductor must be a solid round wire of commercially pure annealed copper. Conductors must meet the requirements of the American Society for Testing and Materials (ASTM) B 3–90 except that requirements for *Dimensions and Permissible Variations* are waived and elongation requirements are superseded by this section.

(2) The minimum conductor elongation in the final wire must comply with the following limits when tested in accordance with ASTM E 8–91.

Conductor—AWG	Minimum Elongation—Percent
22	10
24	10

(3) Joints made in conductors during the manufacturing process may be brazed, using a silver alloy solder and nonacid flux, or they may be welded using either an electrical or cold welding technique. In joints made in uninsulated conductors, the two conductor ends must be butted. Splices made in insulated conductors need not be butted but may be joined in a manner acceptable to REA.

(4)(i) The tensile strength of any section of a conductor containing a factory joint must not be less than 85 percent of the tensile strength of an adjacent section of the solid conductor of equal length without a joint.

(ii)*Engineering Information:* The sizes of wire used and their nominal diameters shall be as shown in the following table:

AWG	Nominal Diameter	
	Millimeters (mm)	(Inches (in.))
22	0.643	(0.0253)
24	0.511	(0.0201)

(5) Each conductor must be insulated with either a colored, solid, insulating grade, high density polyethylene or crystalline propylene/ethylene copolymer or with a solid natural primary layer and a colored, solid outer skin using one of the insulating materials listed in paragraphs (b)(5)(i) through (b)(5)(ii) of this section.

(i) The polyethylene raw material selected to meet the requirements of this section must be Type III, Class A, Category 4 or 5, Grade E9, in accordance with ASTM D 1248–84(1989).

(ii) The crystalline propylene/ethylene raw material selected to meet the requirements of this section must be Class PP 200B 40003 E11 in accordance with ASTM D 4101–82(1988).

(iii) Raw materials intended as conductor insulation furnished to these requirements must be free from dirt, metallic particles, and other foreign matter.

(iv) All insulating raw materials must be accepted by REA prior to their use.

(6) All conductors in any single length of wire must be insulated with the same type of material.

(7) A permissible overall performance level of faults in conductor insulation must average not greater than one fault per 12,000 conductor meters (40,000 conductor feet) for each gauge of conductor.

(i) All insulated conductors must be continuously tested for insulation faults during the twinning operation with the method of test acceptable to REA. The length count and number of faults must be recorded. The information must be retained for a period of 6 months and be available for review by REA when requested.

(ii) The voltages for determining compliance with the requirements of this section are as follows:

AWG	Direct Current Voltages (Kilovolts)
22	6.0
24	5.0

(8) Repairs to the conductor insulation during manufacturing are permissible. The method of repair must be accepted by REA prior to its use. The repaired insulation must be capable of meeting the relevant electrical requirements of this section.

(9) All repaired sections of insulation must be retested in the same manner as originally tested for compliance with paragraph (b)(7) of this section.

(10) Colored insulating material removed from or tested on the conductor, from a finished wire, must be capable of meeting the following performance requirements:

Property	Polyethylene	Crystalline Propylene/Ethylene Copolymer
Melt Flow Rate Percent increase from raw material, Maximum.		

Property	Polyethylene	Crystalline Propylene/Ethylene Copolymer
<0.5 (Initial Melt Index).	[illegible]	—
0.5–2.00 (Initial Melt Index).	[illegible]	—
≤5.0 (Initial Melt Index).	—	110
Tensile Strength—Minimum		
Megapascals (MPa).	16.5	21.0
(Pounds per Square Inch (psi)).	(2,400)	(3,000)
Ultimate Elongation		
Minimum, Percent.	300	[illegible]
Cold Bend		
Failures, Maximum.	0/10	[illegible]
Shrinkback		
Maximum, mm (in.).	10 (0.375)	10 (0.375)
Oxygen Induction Time		
Minimum, Minutes.	[illegible]	[illegible]

(11) *Testing procedures.* The procedures for testing the insulation samples for compliance with paragraph (b)(10) of this section must be as follows.

(i) *Melt flow rate.* The melt flow rate must be determined as described in ASTM D 1238–90b. Condition E must be used for polyethylene. Condition L must be used for crystalline propylene/ethylene copolymer. The melt flow test must be conducted prior to the filling operation.

(ii) *Tensile strength and ultimate elongation.* Samples of the insulation material, removed from the conductor, must be tested in accordance with ASTM D 4565–90a using the following conditions. The minimum length of unclamped specimen must be 50 mm (2.0 in.). The minimum speed of jaw separation must be 25 mm (1.0 in.) per minute per 25 mm (1.0 in.) of unclamped specimen. The temperature of specimens and surrounding shall be 23 ± 1°C.

Note: Quality assurance testing at a jaw separation speed of 500 mm/min (20 in./min) is permissible. Failures at this rate must be retested at the 50 mm/min (2 in./min) rate to determine section compliance.

(iii) *Cold bend.* Samples of the insulation material on the conductor must be tested in accordance with ASTM D 4565–90a at a temperature of −40 ± 1°C with a mandrel diameter equal to 3 times the outside diameter of the insulated conductor. There must be no cracks visible to normal or corrected-to-normal vision.

(iv) *Shrinkback.* Samples of insulation must be tested for four hours in accordance with ASTM D 4565–90a. The temperature for the type of material is listed as follows:

Material	Temperature
Polyethylene	115 ± 1°C
Crystalline propylene/ethylene Copolymer	130 ± 1°C

(v) *Oxygen induction time.* Samples of insulation, which have been conditioned in accordance with paragraph 17.3 of ASTM D 4565–90a, must be tested in accordance with the procedures of ASTM D 4565–90a using copper pans and a test temperature of 199 ± 1°C.

(12) Other methods of testing may be used if acceptable to REA.

(c) *Identification of pairs and twisting of pairs.* (1) The insulation must be colored to identify:

(i) The tip and ring conductor of each pair; and

(ii) Each pair in the completed wire.

(2) The colors to be used to provide identification of the tip and ring conductor of each pair are shown in the following table:

Pair No.	Color	
	Tip	Ring
1	White	Blue
2	White	Orange
3	White	Green

(3) *Standards of color.* The colors of the insulated conductors supplied in accordance with this section are specified in terms of the Munsell Color System (ASTM D 1535–89) and must comply with the "Table of Wire and Cable Limit Chips" as defined in ANSI/EIA-359-A-84. (Visual color standards meeting these requirements may be obtained directly from the Munsell Color Company, Inc., 2441 North Calvert Street, Baltimore, Maryland 21218).

(4) Positive identification of the tip and ring conductors of each pair by marking each conductor of a pair with the color of its mate is permissible. The method of marking must be accepted by REA prior to its use.

(5) Other methods of providing positive identification of the tip and ring conductors of each pair may be employed if accepted by REA prior to its use.

(6) The insulated conductors must be twisted into pairs.

(7) In order to provide sufficiently high crosstalk isolation, the pair twists must be designed to enable the wire to meet the capacitance unbalance and the crosstalk loss requirements of paragraphs (m)(2), (m)(3), and (m)(4) of this section.

(8) The average length of pair twists in any pair in the finished wire, when measured on any 3 meter (m) (10 foot(ft)) length, must not exceed 152 mm (6 in.).

(9) An alternative method of forming the two pair wire is the use of a star-quad configuration.

(i) The assembly of the star-quad must be such as to enable the wire to meet the capacitance unbalance and the crosstalk loss requirements of paragraphs (m)(2), (m)(3), and (m)(4) of this section.

(ii) The four individual insulated conductors must be twisted together to form a star-quad configuration with the tip and ring conductors of each pair diagonally opposite each other in the quad.

(iii) The average length of twist for the star-quad in the finished wire, when measured on any 3 m (10 ft) length, must not exceed 152 mm (6 in.).

(iv) The following color scheme must be used to provide identification of the tip and ring conductor of each pair in the star-quad:

Pair No.	Color	
	Tip	Ring
1	White with blue stripe.	Blue
2	White with orange stripe.	Orange

(v) If desired, the blue and orange conductors may contain a white stripe. The stripes in this case must be narrow enough so that the tip and ring identification is obvious.

(d) *Forming of the wire core.* (1) Twisted pairs or star-quad configuration must be assembled in such a way as to form a substantially cylindrical group.

(2) The filling compound must be applied to the wire core in such a way as to provide a completely filled core as is commercially practical.

(3) If desired for manufacturing reasons, white or colored binders of nonhygroscopic and nonwicking material may be applied over the core.

(e) *Filling compound.* (1) After or during the stranding operation and prior to application of the optional core wrap and inner jacket, a homogeneous filling compound free of agglomerates must be applied to the wire core. The compound must be as nearly colorless as is commercially feasible and consistent with the end product requirements and pair identification.

(2) The filling compound must be free from dirt, metallic particles, and other foreign matter. It must be applied in such a way as to fill the space within the wire core.

(3) The filling compound must be nontoxic and present no dermal hazards.

(4) The filling compound must exhibit the following dielectric properties at a temperature of 23 ± 3°C when measured in accordance with ASTM D 150–87 or ASTM D 4872–88.

(i) The dissipation factor must not exceed 0.0015 at a frequency of 1 megahertz (MHz).

(ii) The dielectric constant must not exceed 2.30.

(5) The volume resistivity must not be less than 10^{12} ohm-cm at a temperature of 23 ± 3°C when measured in accordance with ASTM D 257–91 or ASTM D 4872–88.

(6) The individual wire manufacturer must satisfy REA that the filling compound selected for use is suitable for its intended application. The filling compound must be compatible with the wire components when tested in accordance with ASTM D 4568–86 at a temperature of 80°C.

(f) *Core wrap (optional).* (1) When a core wrap is used, it must consist of a layer of nonhygroscopic and nonwicking dielectric material. The wrap must be applied with an overlap.

(2) The core wrap must provide a sufficient heat barrier to prevent visible evidence of conductor insulation deformation or adhesion between conductors, caused by adverse heat transfer during the inner jacketing operation.

(3) If required for manufacturing reasons, white or colored binders of nonhygroscopic and nonwicking material may be applied over the core wrap.

(4) Sufficient filling compound must be applied to the core wrap that voids or air spaces existing between the core and inner side of the core wrap are minimized.

(g) *Inner jacket.* (1) An inner jacket must be applied over the core and/or core wrap.

(2) The jacket must be free from holes, splits, blisters, or other imperfections and must be as smooth and concentric as is consistent with the best commercial practice.

(3) The inner jacket material and test requirements must be as specified for the outer jacket material per paragraphs (j)(3) through (j)(5)(iv) of this section.

(4) The inner jacket thickness at any point must not be less than 0.5 mm (0.020 in.). The thickness must be determined from measurements on 50 mm (2 in.) samples taken not less than 0.3 m (1 ft) from either end of the wire. The average must be determined from 4 readings taken approximately 90° apart on any cross section of the samples. The maximum and minimum points must be determined by exploratory measurements. The maximum thickness minus the minimum thickness at any cross section must not exceed 43 percent of the average thickness at that cross section.

(h) *Flooding compound.* (1) Sufficient flooding compound must be applied on all sheath interfaces so that voids and air spaces in these areas are minimized.

(2) The flooding compound must be compatible with the jacket when tested in accordance with ASTM D 4568–86 at a temperature of 80°C. The floodant must exhibit adhesive properties sufficient to prevent jacket slip when tested in accordance with the requirements of appendix A, paragraph (III)(5), of this section.

(3) The individual wire manufacturer must satisfy REA that the flooding compound selected for use is acceptable for the application.

(i) *Shield.* (1) A shield must be applied either longitudinally or helically over the inner jacket.

(i) If the shield is applied longitudinally, it must be corrugated.

(ii) If the shield is applied helically, it must be smooth.

(2) The overlap for longitudinally applied shields must be a minimum of 2 mm (0.075 in.) The overlap for helically applied shields must be a minimum of 23 percent of the tape width.

(3) General requirements for application of the shielding material are as follows:

(i) Successive lengths of shielding tapes may be joined during the manufacturing process by means of cold weld, electric weld, soldering with a nonacid flux, or other acceptable means;

(ii) Where two ends of a metal shield are to be joined together, care shall be taken to clean the metal surfaces in order to provide for a good mechanical and electrical connection;

(iii) The shields of each length of wire must be tested for continuity. A one meter (3 ft) section of shield containing a factory joint must exhibit not more than 110 percent of the resistance of a shield of equal length without a joint;

(iv) The breaking strength of any section of a shield tape containing a factory joint must not be less than 80 percent of the breaking strength of an adjacent section of the shield of equal length without a joint;

(v) The reduction in thickness of the shielding material due to the corrugating or application process must be kept to a minimum and must not exceed 10 percent at any spot; and

(vi) The shielding material must be applied in such a manner as to enable the wire to pass the bend test as specified in paragraph (n)(3) of this section.

(4) The following materials are acceptable for use as wire shielding:

Standard Wire	Gopher Resistant Wire
Copper Alloy 220 (Bronze).	Copper-Clad Stainless Steel
(0.1016 ± 0.0076 mm) .. (0.0040 ± 0.0003 in.)	0.1270 ± 0.0127 mm (0.0050 ± 0.0005 in.)
Copper Alloy 220 (Bronze).	Copper Alloy 664
0.1270 ± 0.0127 mm .... (0.0050 ± 0.0005 in.)	0.1397 ± 0.0127 mm (0.0055 ± 0.0005 in.)
	Copper-Clad Alloy Steel 0.1270 ± 0.0127 mm (0.0050 ± 0.0005 in.)

(i) The copper-clad steels and copper alloy 664 shielding tapes must be capable of meeting the following performance requirements prior to application to the wire:

Property	Requirement
Tensile Strength Minimum, MPa (psi)	379 (55,000)
Tensile Yield Minimum, MPa (psi)	241 (35,000)
Elongation Minimum, percent in 50 mm (2 in.).	15

(ii) *Copper alloy 220.* The shielding material, prior to application to the wire, must be in the fully annealed condition and shall conform to the requirements of ASTM B 694–86 for C22000 commercial bronze.

(iii) *Copper-clad stainless steel.* In addition to meeting the requirements of paragraph (i)(4)(i) of this section, the shielding material, prior to application to the wire, must be in the fully annealed condition and must conform to the requirements of ASTM B 694–86, with a cladding ratio of 16/68/16 and must have a minimum electrical conductivity of 28 percent IACS when measured in accordance with ASTM B 193–87.

(iv) *Copper alloy 664.* In addition to meeting the requirements of paragraph (i)(4)(i) of this section, the shielding material, prior to application to the wire, must be annealed temper and must conform to the requirements of ASTM B 694–86 and must have a minimum electrical conductivity of 28 percent IACS when measured in accordance with ASTM B 193–87.

(v) *Copper-clad alloy steel.* In addition to meeting the requirements of paragraph (i)(4)(i) of this section, the shielding material, prior to application to the wire, must be in the fully annealed condition and the copper component must conform to the requirements of ASTM B 224–91 and the alloy steel component must conform to the requirements of ASTM A 505–87,

with a cladding ratio of 16/68/16, and must have a minimum electrical conductivity of 28 percent IACS when measured in accordance with ASTM B 193–87.

(j) *Outer jacket.* (1) The outer jacket must provide the wire with a tough, flexible, protective covering which can withstand exposure to sunlight, to atmospheric temperatures and stresses reasonably expected in normal installation and service.

(2) The jacket must be free from holes, splits, blisters, or other imperfections and must be as smooth and concentric as is consistent with the best commercial practice.

(3) The raw material used for the outer jacket must be one of the five types listed in paragraphs (j)(3)(i) through (j)(3)(v) of this section. The raw material must contain an antioxidant to provide long term stabilization and the materials must contain a 2.60 ± 0.25 percent concentration of furnace black to provide ultraviolet shielding. Both the antioxidant and furnace black must be compounded into the material by the raw material supplier.

(i) Low density, high molecular weight polyethylene (LDHMW) must conform to the requirements of ASTM D 1248–84(1989), Type I, Class C, Category 4 or 5, Grade J3.

(ii) Low density, high molecular weight ethylene copolymer (LDHMW) must conform to the requirements of ASTM D 1248–84 (1989), Type I, Class C, Category 4 or 5, Grade J3.

(iii) Linear low density, high molecular weight polyethylene (LLDHMW) must conform to the requirements of ASTM D 1248–84(1989), Type I, Class C, Category 4 or 5, Grade J3.

(iv) High density polyethylene (HD) must conform to the requirements of ASTM D 1248–84(1989), Type III, Class C, Category 4 or 5, Grade J4.

(v) Medium density polyethylene (MD) must conform to the requirements of ASTM D 1248–84(1989), Type II, Class C, Category 4 or 5, Grade J4.

(vi) Particle size of the carbon selected for use must not average greater than 20 nanometers.

(vii) Absorption coefficient must be a minimum of 400 in accordance with the procedures of ASTM D 3349–86.

(4) The outer jacketing material removed from or tested on the wire must be capable of meeting the following performance requirements:

Property	LLDHMW, Ethylene Copolymer	LDHMW Polyethylene	HD or MD Polyethylene
Melt Flow Rate Percent Increase from raw material Maximum		50	50
<0.41 (Initial Melt Index)	100	—	—
0.41–2.00 (Initial Melt Index)	50	—	—
Tensile Strength Minimum, MPa (psi)	12.0 (1,700)	12.0 (1,700)	16.5 (2,400)
Ultimate Elongation Percent, Minimum	400	400	300
Shrinkback Percent of Length, Maximum	5	5	5
Impact Failures, Maximum	2/10	2/10	2/10

(5) *Testing procedures.* The procedures for testing the jacket samples for compliance with paragraph (j)(4) of this section must be as follows:

(i) *Melt flow rate.* The melt flow rate must be as determined by ASTM D 1238–90b, Condition E. Jacketing material must be free from flooding and filling compound.

(ii) *Tensile strength and ultimate elongation.* Test in accordance with ASTM D 4565–90a, using a jaw separation speed of 500 mm/min (20 in./min) for low density material and 50 mm/min (2 in./min) for high and medium density materials.

(iii) *Shrinkback.* Test in accordance with the procedures specified in ASTM D 4565–90a using a test temperature of 100 ± 1°C for low density material and a test temperature of 115 ± 1°C for high and medium density materials.

(iv) *Impact.* The test must be performed in accordance with ASTM D 4565–90a using an impact force of 4 newton-meter (3 pound force-foot) at a temperature of −20 ± 2°C. The cylinder must strike the sample at the shield overlap. A crack or split in the jacket constitutes failure.

(6) *Jacket thickness.* The minimum jacket thickness must be 0.64 mm (0.025 in.) except that the minimum thickness over the sheath slitting cord, if present, must be 0.46 mm (0.018 in.). The minimum point must be determined by exploratory measurements. The average thickness at any cross section must be determined from four readings including the minimum point, taken approximately 90° apart. The thickness measurement must exclude any jacket material that has formed into the corrugation. The maximum thickness at any cross section must not be greater than 155 percent of the minimum thickness.

(7) *Eccentricity.* The eccentricity of the jacket must not exceed 43 percent when calculated using the formula as follows:

$$\frac{\text{Maximum Thickness} - \text{Minimum Thickness}}{\text{Average Thickness}} \times 100 \text{ Percent}$$

(k) *Sheath slitting cord (optional).* (1) Sheath slitting cords may be used in the wire structure at the option of the manufacturer.

(2) When a sheath slitting cord is used it must be nonhygroscopic and nonwicking, continuous throughout a length of wire, and of sufficient strength to open the sheath without breaking the cord.

(3) Sheath slitting cords must be capable of consistently slitting the jacket(s) and/or shield for a continuous length of 0.6 m (2 ft) when tested in accordance with the procedure specified in appendix B of this section.

(l) *Identification marker and length marker.* (1) Each length of wire must be permanently identified as to manufacturer and year of manufacture.

(2) The number of conductor pairs and their gauge size must be marked on the jacket.

(3) The marking must be printed on the jacket at regular intervals of not more than 1.5 m (5 ft).

(4) An alternative method of marking may be used if accepted by REA prior to its use.

(5) The completed wire must have sequentially numbered length markers in FEET OR METERS at regular intervals of not more than 1.5 m (5 ft) along the outside of the jacket.

(6) The method of length marking must be such that for any single length of wire, continuous sequential numbering must be employed.

(7) The numbers must be dimensioned and spaced to produce good legibility and must be approximately 3 mm (0.125 in.) in height. An occasional illegible marking is permissible if there is a legible marking located not more than 1.5 m (5 ft) from it.

(8) The method of marking must be by means of suitable surface markings producing a clear, distinguishable, contrasting marking acceptable to REA. Where direct or transverse printing is employed, the characters should be

indented to produce greater durability of marking. Any other method of length marking must be acceptable to REA as producing a marker suitable for the field. Size, shape and spacing of numbers, durability, and overall legibility of the marker will be considered in acceptance of the method.

(9) The accuracy of the length marking must be such that the actual length of any wire section is never less than the length indicated by the marking and never more than one percent greater than the length indicated by the marking.

(10) The color of the initial marking must be white or silver. If the initial marking fails to meet the requirements of the preceding paragraphs, it will be permissible to either remove the defective marking and re-mark with the white or silver color or leave the defective marking on the wire and re-mark with yellow. No further re-marking is permitted. Any re-marking must be on a different portion of the wire circumference than any existing marking when possible and have a numbering sequence differing from any other existing marking by at least 5,000.

(11) Any reel of wire which contains more than one set of sequential markings must be labeled to indicate the color and sequence of marking to be used. The labeling must be applied to the reel and also to the wire.

(m) *Electrical requirements*—(1) *Mutual capacitance and conductance.* (i) The average mutual capacitance (corrected for length) of all pairs in any reel must not exceed 52 ± 4 nanofarad/kilometer (nF/km) (83 ± 7 nanofarad/mile (nF/mile)) when tested in accordance with ASTM D 4566–90 at a frequency of 1.0 ± 0.1 kilohertz (kHz) and a temperature of 23 ± 3°C.

(ii) The mutual conductance (corrected for length and gauge) of any pair must not exceed 2 micromhos/kilometer (micromhos/km) (3.3 micromhos/mile) when tested in accordance with ASTM D 4566–90 at a frequency of 1.0 ± 0.1 kHz and a temperature of 23 ± 3°C.

(2) *Pair-to-pair capacitance unbalance.* The capacitance unbalance between any pair of the completed wire must not exceed 145 picofarad/kilometer (pF/km) (80 picofarad/1000 ft (pF/1000 ft)) when tested in accordance with ASTM D 4566–90 at a frequency of 1.0 ± 0.1 kHz and a temperature of 23 ± 3°C.

(3) *Pair-to-ground capacitance unbalance*—(i) *Pair-to-ground.* The capacitance unbalance as measured on the individual pairs of the completed wire must not exceed 2625 pF/km (800 pF/1000 ft) when tested in accordance with ASTM D 4566–90 at a frequency of 1.0 ± 0.1 kHz and a temperature of 23 ± 3°C.

(ii) When measuring pair-to-ground capacitance unbalance, all pairs, except the pair under test, are grounded to the shield.

(iii) Pair-to-ground capacitance unbalance may vary directly with the length of the wire.

(4) *Far-end crosstalk loss.* (i) The output-to-outputfar-end crosstalk loss (FEXT) between any pair combination of a completed wire when measured in accordance with ASTM D 4566–90 at a test frequency of 150 kHz must not be less than 58 decibel/ kilometer (dB/km) (63 decibel/1000 ft). If the loss K_o at a frequency F_o for length L_o is known, then K_x can be determined for any other frequency F_x or length L_x by:

$$\text{FEXT loss}(K_X) = K_O - 20 \log 10 \frac{F_X}{F_O} - 10 \log 10 \frac{L_X}{L_O}$$

(5) *Attenuation.* The attenuation of any individual pair on any reel of wire must not exceed the following limits when measured at or corrected to a temperature of 20 ± 1°C and a test frequency of 150 kHz. The test must be conducted in accordance with ASTM D 4566–90.

Conductor AWG	Individual Pair Attenuation dB/km (decibel/mile (dB/mile))	
	Maximum	Minimum
22	6.8 (11.0)	5.0 (8.1)
24	8.7 (14.0)	6.6 (10.7)

(6) *Insulation resistance.* Each insulated conductor in each length of completed wire, when measured with all other insulated conductors and the shield grounded, must have an insulation resistance of not less than 1600 megohm-kilometer (1000 megohm-mile) at 20 ± 1°C. The measurement must be made in accordance with the procedures of ASTM D 4566–90.

(7) *High voltage test.* (i) In each length of completed wire, the insulation between conductors when tested in accordance with ASTM D 4566–90 must withstand for 3 seconds a direct current (dc) potential whose value is not less than:

(A) 5.0 kilovolts for 22-gauge conductors; and

(B) 4.0 kilovolts for 24-gauge conductors.

(ii) In each length of completed wire, the dielectric strength between the shield and all conductors in the core must be tested in accordance with ASTM D 4566–90 and must withstand, for 3 seconds, a dc potential whose value is not less than 20 kilovolts.

(8) *Conductor resistance.* The dc resistance of any conductor must be measured in the completed wire in accordance with ASTM D 4566–90 and must not exceed the following values when measured at or corrected to a temperature of 20 ± 1°C.

AWG	Maximum Resistance	
	ohms/kilometer	(ohms/1000 ft)
22	57.1	(17.4)
24	90.2	(27.5)

(9) *Resistance unbalance.* (i) The difference in dc resistance between the two conductors of any pair in the completed wire must not exceed 5.0 percent when measured in accordance with the procedures of ASTM D 4566–90.

(ii) The resistance unbalance between tip and ring conductors shall be random with respect to the direction of unbalance. That is, the resistance of the tip conductors shall not be consistently higher with respect to the ring conductors and vice versa.

(n) *Mechanical requirements*—(1) *Defective wire.* Pairs in each length of wire will not be permitted to have either a ground, cross, short or open circuit condition.

(2) *Wire breaking strength.* The breaking strength of the completed wire must not be less than 890 newtons (200 pound-force) when tested in accordance with ASTM D 4565–90a using a jaw separation speed of 25 mm/min (1.0 in./min).

(3) *Wire bending test.* The completed wire must be capable of meeting the requirements of ASTM D 4565–90a after conditioning at −20 ± 2°C and at 23 ± 2°C.

(4) *Water penetration test.* (i) A one meter (3 ft) length of completed wire must be stabilized at 23 ± 2°C and tested in accordance with ASTM D 4565–90a using a one meter (3 ft) water head over the sample or placed under the equivalent continuous pressure for one hour.

(ii) After the one hour period, there must be no water leakage in the sheath interfaces, under the core wrap or between any insulated conductors in the core.

(iii) If water leakage is detected in the first sample, one 3 m (10 ft) additional adjacent sample from the same reel of wire must be tested in accordance with paragraph (n)(4)(ii) of this section. If the second sample exhibits water leakage, the entire reel of wire is to be rejected. If the second sample exhibits no

leakage, the entire reel of wire is considered acceptable.

(5) *Compound flow test.* The completed wire must be capable of meeting the compound flow test specified in ASTM D 4565–90a when exposed for a period of 24 hours at a temperature of 80 ± 1°C. At the end of this test period, there must be no evidence of flowing or dripping of compound from either the core or sheath interfaces.

(o) *Acceptance testing and extent of testing.* (1) The tests described in appendix A of this section are intended for acceptance of wire designs and major modifications of accepted designs. REA decides what constitutes a major modification. These tests are intended to show the inherent capability of the manufacturer to produce wire products having long life and stability.

(2) For initial acceptance. the manufacturer must submit:

(i) An original signature certification that the product fully complies with each requirement of this section;

(ii) Qualification Test Data, per appendix A of this section;

(iii) To periodic plant inspections;

(iv) A certification that the product does or does not comply with the domestic origin manufacturing provisions of the "Buy American" requirements of the Rural Electrification Act of 1938 (7 U.S.C. 901 *et seq.*);

(v) Written user testimonials concerning performance of the product; and

(vi) Other nonproprietary data deemed necessary by the Chief, Outside Plant Branch (Telephone).

(3) For requalification acceptance, the manufacturer must submit an original signature certification that the product fully complies with each section of the specification, excluding the Qualification Section, and a certification that the product does or does not comply with the domestic origin manufacturing provisions of the "Buy American" requirements of the Rural Electrification Act of 1938 (7 U.S.C. 901 *et seq.*) for acceptance by June 30 every three years. The required data and certification must have been gathered within 90 days of the submission.

(4) Initial and requalification acceptance requests should be addressed to: Chairman, Technical Standards, Committee "A" (Telephone), Telecommunications Standards Division, Rural Electrification Administration, Washington, DC 20250–1500.

(5) Tests on 100 percent of completed wire. (i) The shield of each length of wire must be tested for continuity using the procedures of ASTM D 4566–90.

(ii) Dielectric strength between all conductors and the shield must be tested to determine freedom from grounds in accordance with paragraph (m)(7)(ii) of this section.

(iii) Each conductor in the completed wire must be tested for continuity using the procedures of ASTM D 4566–90.

(iv) Dielectric strength between conductors must be tested to ensure freedom from shorts and crosses in accordance with paragraph (m)(7)(i) of this section.

(v) The average mutual capacitance must be measured on all wires.

(6) *Capability tests.* Tests on a quality assurance basis must be made as frequently as is required for each manufacturer to determine and maintain compliance with:

(i) Performance requirements for conductor insulation and jacket material;

(ii) Performance requirements for filling and flooding compounds;

(iii) Sequential marking and lettering;

(iv) Capacitance unbalance and crosstalk;

(v) Insulation resistance;

(vi) Conductor resistance and resistance unbalance;

(vii) Wire bending and wire breaking strength tests;

(viii) Mutual conductance and attenuation; and

(ix) Water penetration and compound flow tests.

(p) *Summary of records of electrical and physical tests.* (1) Each manufacturer must maintain suitable summary of records for a period of at least 3 years for all electrical and physical tests required on completed wire by this section as set forth in paragraphs (o)(5) and (o)(6) of this section. The test data for a particular reel shall be in a form that it may be readily available to the purchaser or to REA upon request.

(2) Measurements and computed values must be rounded off to the number of places of figures specified for the requirement according to ASTM E 29–90.

(q) *Manufacturing irregularities.* (1) Repairs to the inner jacket and shield are not permitted in wire supplied to the end user under this section.

(2) Minor defects in the outer jackets (defects having a dimension of 3 mm (0.125 in.) or less in any direction) may be repaired by means of heat fusing in accordance with good commercial practices utilizing sheath grade compound.

(r) *Preparation for shipment.* (1) The wire must be shipped on reels. The diameter of the drum must be large enough to prevent damage to the wire from reeling or unreeling. The reels must be substantial and so constructed as to prevent damage to the wire during shipment and handling.

(2) The thermal wrap must comply with the requirements of appendix C of this section. When a thermal reel wrap is supplied, the wrap must be applied to the reel and must be suitably secured in place to minimize thermal exposure to the wire during storage and shipment. The use of the thermal reel wrap as a means of reel protection will be at the option of the manufacturer unless specified by the end user.

(3) The outer end of the wire must be securely fastened to the reel head so as to prevent the wire from becoming loose in transit. The inner end of the wire must be securely fastened in such a way as to make it readily available if required for electrical testing. Spikes, staples, or other fastening devices which penetrate the wire jacket must not be used. The method of fastening the wire ends must be accepted by REA prior to it being used.

(4) Each length of wire must be wound on a separate reel unless otherwise specified or agreed to by the purchaser.

(5) Each reel must be plainly marked to indicate the direction in which it should be rolled to prevent loosening of the wire on the reel.

(6) Each reel must be stenciled or labeled on either one or both sides with the name of the manufacturer, year of manufacture, actual shipping length, an inner and outer end sequential length marking, description of the wire, reel number and the REA wire designation:

Wire Designation
BFW
Wire Construction
Pair Count
Conductor Gauge

N = Copper Alloy 220 (Bronze) Shield
Y = Gopher Resistant Shields

Example: BFWY 3–24

Buried Filled Wire, Gopher Resistant Shield, 3 pair, 24 AWG

(7) Both ends of the filled buried wire, manufactured to the requirements of this section, must be equipped with end caps which are acceptable to REA.

(The information and recordkeeping requirements of this section have been approved by the Office of Management and Budget (OMB) under the Control Number 0572–0077.)

Appendix A to 7 CFR 1755.860—Qualification Test Methods

(l) The test procedures described in this appendix are for qualification of initial designs and major modifications of accepted

designs. Included in (V) of this appendix are suggested formats that may be used in submitting test results to REA.

(II) *Sample Selection and Preparation.* (1) All testing must be performed on lengths removed sequentially from the same 3 pair, 22 gauge jacketed wire. This wire must not have been exposed to temperatures in excess of 38°C since its initial cool down after sheathing. The lengths specified are minimum lengths and if desirable from a laboratory testing standpoint longer lengths may be used.

(a) Length A shall be 10 ± 0.2 meters (33 ± 0.5 feet) long and must be maintained at 23 ± 3°C. One length is required.

(b) Length B shall be 12 ± 0.2 meters (40 ± 0.5 feet) long. Prepare the test sample by removing the inner and outer jacket, shield, and core wrap, if present, for a sufficient distance on both ends to allow the insulated conductors to be flared out. Remove sufficient conductor insulation so that appropriate electrical test connections can be made at both ends. Coil the specimen with a diameter of 15 to 20 times its sheath diameter. Three lengths are required.

(c) Length C shall be one meter (3 feet) long. Four lengths are required.

(d) Length D shall be 300 millimeters (1 foot) long. Four lengths are required.

(e) Length E shall be 600 millimeters (2 feet) long. Four lengths are required.

(f) Length F shall be 3 meters (10 feet) long and must be maintained at 23 ± 3°C for the duration of the test. Two lengths are required.

(2) *Data Reference Temperature.* Unless otherwise specified, all measurements shall be made at 23 ± 3°C.

(III) *Environmental Tests*—(1) *Heat Aging Test*—(a) *Test Samples.* Place one sample each of lengths B, C, D, and E in an oven or environmental chamber. The ends of sample B must exit from the chamber or oven for electrical tests. Securely seal the oven exit holes.

(b) *Sequence of Tests.* After conditioning the samples are to be subjected to the following tests:

(i) Water Immersion Test outlined in (III)(2) of this appendix;

(ii) Water Penetration Test outlined in (III)(3) of this appendix; .

(iii) Insulation Compression Test outlined in (III)(4) of this appendix; and

(iv) Jacket Slip Strength Test outlined in (III)(5) of this appendix.

(c) *Initial Measurements.* (i) For sample B, measure the open circuit capacitance and conductance for each pair at 1 and 150 kilohertz and the attenuation at 150 kilohertz after conditioning the sample at the data reference temperature for 24 hours. Calculate the average and standard deviation for the data of the 3 pairs on a per kilometer (per mile) basis.

(ii) The attenuation at 150 kilohertz may be calculated from open circuit admittance (Yoc) and short circuit impedance (Zsc) or may be obtained by direct measurement of attenuation.

(iii) Record on suggested formats attached in (V) of this appendix or on other easily readable formats.

(d) *Heat Conditioning.* (i) Immediately after completing the initial measurements, condition the sample for 14 days at a temperature of 65 ± 2°C.

(ii) At the end of this period note any exudation of filling compound. Measure and calculate the parameters given in (III)(1)(c) of this appendix. Record on suggested formats attached in (V) of this appendix or on other easily readable formats.

(iii) Cut away and discard a one meter (3 foot) section from each end of length B.

(e) *Overall Electrical Deviation.* (i) Calculate the percent change in all average parameters between the final parameters after conditioning with the initial parameters in (III)(1)(c) of this appendix.

(ii) The stability of the electrical parameters after completion of this test must be within the following prescribed limits:

(A) *Capacitance.* The average mutual capacitance must be within 5 percent of its original value;

(B) The change in average mutual capacitance must be less than 5 percent over the frequency range of 1 to 150 kilohertz;

(C) *Conductance.* The average mutual conductance must not exceed 2 micromhos/kilometer (3.3 micromhos/mile) at a frequency of 1 kilohertz; and

(D) *Attenuation.* The attenuation must not have increased by more than 5 percent over its original value.

(2) *Water Immersion Electrical Test*—(a) *Test Sample Selection.* The 10 meter (33 foot) section of length B must be tested.

(b) *Test Sample Preparation.* Prepare the sample by removing the inner and outer jacket, shield, and core wrap, if present, for a sufficient distance to allow one end to be accessed for test connections. Cut out a series of 2.5 millimeter by 13 millimeter (0.1 inch by 0.5 inch) rectangular slots along the test sample, at 300 millimeter (1 foot) intervals progressing successively 90 degrees around the circumference of the wire. Assure that the wire core is exposed at each slot by slitting the inner jacket and core wrap if present. Place the prepared sample in a dry vessel which when filled will maintain a one meter (3 foot) head of water over 6 meters (20 feet) of uncoiled wire. Extend and fasten the ends of the wire so they will be above the water line and the pairs are rigidly held for the duration of the test.

(c) *Capacitance and Conductance Testing.* Measure the initial values of mutual capacitance and conductance of all pairs in each wire at a frequency of 1 kilohertz before filling the vessel with water. Be sure the wire shield is grounded to the test equipment. Fill the vessel until there is a one meter (3 foot) head of water on the wires.

(i) Remeasure the mutual capacitance and conductance after the wires have been submerged for 24 hours and again after 30 days.

(ii) Record each sample separately on the suggested formats attached in (V) of this appendix or on other easily readable formats.

(d) *Overall Electrical Deviation.* (i) Calculate the percent change in all average parameters between the final parameters after conditioning with the initial parameters in (III)(2)(c) of this appendix.

(ii) The stability of the electrical parameters after of the test must be within the following prescribed limits:

(A) *Capacitance.* The average mutual capacitance must be within 5 percent of its original value; and

(B) *Conductance.* The average mutual conductance must not exceed 2 micromhos/kilometer (3.3 micromhos/mile) at a frequency of 1 kilohertz.

(3) *Water Penetration Testing.* (a) A watertight closure must be placed over the jacket of length C. The closure must not be placed over the jacket so tightly that the flow of water through preexisting voids or air spaces is restricted. The other end of the sample must remain open.

(b) Test per Option A or Option B. (i) *Option A.* Weigh the sample and closure prior to testing. Fill the closure with water and place under a continuous pressure of 10 ± 0.7 kilopascals (1.5 ± 0.1 pounds per square inch gauge) for one hour. Collect the water leakage from the end of the test sample during the test and weigh to the nearest 0.1 gram. Immediately after the one hour test, seal the ends of the wire with a thin layer of grease and remove all visible water from the closure, being careful not to remove water that penetrated into the core during the test. Reweigh the sample and determine the weight of water that penetrated into the core. The weight of water that penetrated into the core must not exceed 1 gram.

(ii) *Option B.* Fill the closure with a 0.2 gram sodium fluorscein per liter water solution and apply a continuous pressure of 10 ± 0.7 kilopascals (1.5 ± 0.1 pounds per square inch gauge) for one hour. Catch and weigh any water that leaks from the end of the wire during the one hour period. If no water leaks from the sample, carefully remove the water from the closure. Then carefully remove the outer jacket, shield, inner jacket and core wrap, if present, one at a time, examining with an ultraviolet light source for water penetration. After removal of the inner jacket and core wrap, if present, carefully dissect the core and examine for water penetration within the core. Where water penetration is observed, measure the penetration distance. The distance of water penetration into the core must not exceed 127 millimeters (5.0 inches).

(4) *Insulation Compression Test.* (a) *Test Sample D.* Remove inner and outer jacket, shield, and core wrap, if present, being careful not to damage the conductor insulation. Remove one pair from the core and carefully separate, wipe off core filler and straighten the insulated conductors. Retwist the two insulated conductors together under sufficient tension to form 10 evenly spaced 360 degree twists in a length of 100 millimeters (4 inches).

(b) *Sample Testing.* Center the mid 50 millimeters (2 inches) of the twisted pair between two smooth rigid parallel metal plates measuring 50 millimeters (2 inches) in length or diameter. Apply a 1.5 volt direct current potential between the conductors, using a light or buzzer to indicate electrical contact between the conductors. Apply a constant load of 67 newtons (15 pound-force) on the sample for one minute and monitor for evidence of contact between the conductors. Record results on suggested formats attached in (V) of this appendix or on other easily readable formats.

(5) *Jacket Slip Strength Test*—(a) *Sample Selection.* Test sample E from (III)(1)(a) of this appendix.

(b) *Sample Preparation.* Prepare test sample in accordance with the procedures specified in ASTM D 4565–90a.

(c) *Sample Conditioning and Testing.* Remove the sample from the tensile tester prior to testing and condition for one hour at 50 ± 2°C. Test immediately in accordance with the procedure specified in ASTM D 4565–90a. A minimum outer jacket slip strength of 67 newtons (15 pound-force) is required. Record the load attained.

(6) *Humidity Exposure.* (a) Repeat steps (III)(1)(a) through (III)(1)(c)(iii) of this appendix for separate set of samples B, C, D and E which have not been subjected to prior environmental conditioning.

(b) Immediately after completing the measurements, expose the test sample to 100 temperature cyclings. Relative humidity within the chamber must be maintained at 90 ± 2 percent. One cycle consists of beginning at a stabilized chamber and test sample temperature of 52 ± 1°C, increasing the temperature to 57 ± 1°C, allowing the chamber and test samples to stabilize at this level, then dropping the temperature back to 52 ± 1°C.

(c) Repeat steps (III)(1)(d)(ii) through (III)(5)(c) of this appendix.

(7) *Temperature Cycling.* (a) Repeat steps (III)(1)(a) through (III)(1)(c)(iii) of this appendix for separate set of samples B, C, D and E which have not been subjected to prior environmental conditioning.

(b) Immediately after completing the measurements, subject the test sample to 10 cycles of temperature between −40°C and +60°C. The test sample must be held at each temperature extreme for a minimum of 1 1/2 hours during each cycle of temperature. The air within the temperature cycling chamber must be circulated throughout the duration of the cycling.

(c) Repeat steps (III)(1)(d)(ii) through (III)(5)(c) of this appendix.

(IV) *Control Sample*—(1) *Test Samples.* A separate set of lengths for samples A, C, D, and E must have been maintained at 23 ± 3°C for at least 48 hours before the testing.

(2) Repeat steps (III)(2) through (III)(5)(c) of this appendix except use length A instead of length B.

(3) *Surge Test.* (a) One length of sample F must be used to measure the breakdown between conductors while the other length of F must be used to measure core to shield breakdown.

(b) The samples must be capable of withstanding, without damage, a single surge voltage of 20 kilovolts peak between conductors, and 35 kilovolts peak between conductors and the shield as hereinafter described. The surge voltage must be developed from a capacitor discharge through a forming resistor connected in parallel with the dielectric of the test sample. The surge generator constants must be such as to produce a surge of 1.5 × 40 microseconds wave shape.

(c) The shape of the generated wave must be determined at a reduced voltage by connecting an oscilloscope across the forming resistor with the wire sample connected in parallel with the forming resistor. The capacitor bank is charged to the test voltage and then discharged through the forming resistor and test sample. The test sample will be considered to have passed the test if there is no distinct change in the wave shape obtained with the initial reduced voltage compared to that obtained after the application of the test voltage.

(V) The following suggested formats may be used in submitting the test results to REA:

Environmental Conditioning _____

FREQUENCY 1 KILOHERTZ

PAIR NUMBER	CAPACITANCE		CONDUCTANCE	
	nF/km	(nF/mile)	micromhos/km	(micromhos/mile)
	Initial	Final	Initial	Final
1				
2				
3				
Average $\bar{x}$				

Overall Percent Difference in Average $\bar{x}$ Capacitance:_____ Conductance: _____

Environmental Conditioning _____

FREQUENCY 150 KILOHERTZ

PAIR NUMBER	CAPACITANCE		CONDUCTANCE		ATTENUATION	
	nF/km	(nF/mile)	micromhos/km	(micromhos/mile)	dB/km	(dB/mile)
	Initial	Final	Initial	Final	Initial	Final
1						
2						
3						
Average $\bar{x}$						

Overall Percent Difference in Average $\bar{x}$ Capacitance:_____ Conductance: _____ Attenuation:_____

Environmental Conditioning _____

WATER IMMERSION TEST (1 KILOHERTZ)

PAIR NUMBER	CAPACITANCE			CONDUCTANCE		
	nF/km	(nF/mile)		micromhos/km	(micromhos/mile)	
	Initial	24 hours	Final	Initial	24 hours	Final
1						
2						
3						
Average $\bar{x}$						

Overall Percent Difference in Average $\bar{x}$ Capacitance:_____ Conductance: _____

Water Penetration Test

	Option A		Option B	
	End Leakage grams	Weight Gain grams	End Leakage grams	Penetration mm (in.)
Control				
Heat Age				
Humidity Exposure				
Temperature Cycling				

Insulation Compression

	Failures
Control	
Heat Age	
Humidity Exposure	
Temperature Cycling	

Jacket Slip Strength @ 50°C

	Load in newtons (pound-force)
Control	
Heat Age	
Humidity Exposure	
Temperature Cycling	

Filler Exudation (grams)

Heat Age	
Humidity Exposure	
Temperature Cycle	

Surge Test (kilovolts)

Conductor to Conductor	
Shield to Conductors	

Appendix B to 7 CFR 1755.860—Sheath Slitting Cord Qualification

(I) The test procedures described in this appendix are for qualification of initial and subsequent changes in sheath slitting cords.

(II) *Sample Selection.* All testing must be performed on two 1.2 meters (4 feet) lengths of wire removed sequentially from the same 3 pair, 22 gauge jacketed wire. This wire must not have been exposed to temperatures in excess of 38°C since its initial cool down after sheathing.

(III) *Test Procedure.* (1) Using a suitable tool, expose enough of sheath slitting cord to permit grasping with needle nose pliers.

(2) The prepared test specimens must be maintained at a temperature of 23 ± 1°C for at least 4 hours immediately prior to and during the test.

(3) Wrap the sheath slitting cord around the plier jaws to ensure a good grip.

(4) Grasp and hold the wire in a convenient position while gently and firmly pulling the sheath slitting cord longitudinally in the direction away from the wire end. The angle of pull may vary to any convenient and functional degree. A small starting notch is permissible.

(5) The sheath slitting cord is considered acceptable if the cord can slit the jacket and/or shield for a continuous length of 0.6 meter (2 feet) without breaking the cord.

Appendix C to 7 CFR 1755.860—Thermal Reel Wrap Qualification

(I) The test procedures described in this appendix are for qualification of initial and subsequent changes in thermal reel wraps.

(II) *Sample Selection.* All testing must be performed on two 450 millimeter (18 inch) lengths of wire removed sequentially from the same 3 pair, 22 gauge jacketed wire. This wire must not have been exposed to temperatures in excess of 38°C since its initial cool down after sheathing.

(III) *Test Procedure.* (1) Place the two samples on an insulating material such as wood, etc.

(2) Tape thermocouples to the jackets of each sample to measure the jacket temperature.

(3) Cover one sample with the thermal reel wrap.

(4) Expose the samples to a radiant heat source capable of heating the uncovered jacket sample to a minimum of 71°C. A 600 watt photoflood lamp or an equivalent lamp having the light spectrum approximately that of the sun shall be used.

(5) The height of the lamp above the jacket shall be 380 millimeters (15 inches) or a height that produces the 71°C jacket temperature on the unwrapped sample.

(6) After the samples have stabilized at the temperature, the jacket temperatures of the samples must be recorded after one hour of exposure to the heat source.

(7) Compute the temperature difference between the jackets.

(8) For the thermal reel wrap to be acceptable to REA, the temperature differences between the jacket with the thermal reel wrap and the jacket without the reel wrap must be greater than or equal to 17°C.

Dated: November 3, 1993.

Bob J. Nash,

Under Secretary, Small Community and Rural Development.

[FR Doc 93–27889 Filed 11–18–93; 8:45 am]

BILLING CODE 3410–15–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–NM–74–AD; Amendment 39–8731; AD 93–22–07]

Airworthiness Directives; Corporate Jets Limited (Formerly British Aerospace) Model BAe 125–800A Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Corporate Jets Model BAe 125–800A series airplanes, that requires replacement of the existing forward cabin door retainer catch assembly located in the upper luggage bay shelf with a new, improved assembly. This amendment is prompted by reports which indicate that, under certain conditions, the forward cabin door could be forced to the closed position and held closed. The actions specified by this AD are intended to prevent the forward cabin interior door from closing during takeoff and landing, which could impede or hinder the ability of passengers and crew to exit through the main entrance door during an emergency evacuation.

DATES: Effective December 20, 1993.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 20, 1993.

ADDRESSES: The service information referenced in this AD may be obtained from Corporate Jets, Inc., 22070 Broderick Drive, Sterling, Virginia 20166. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Stephen Slotte, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton,

Washington 98055–4056; telephone (206) 227–2797; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to certain Corporate Jets Limited Model BAe 125–800A series airplanes was published in the Federal Register on July 26, 1993 (58 FR 39689). That action proposed to require replacement of the existing forward cabin door retainer catch assembly located in the upper luggage bay shelf with a new, improved forward cabin door retainer catch assembly.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposed rule.

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 5 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is $55 per work hour. The cost of required parts is expected to be negligible. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $550, or $110 per airplane. This total cost figure assumes that no operator has yet accomplished the requirements of this AD.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

93–22–07 Corporate Jets Limited (Formerly British Aerospace): Amendment 39–8731. Docket 93–NM–74–AD.

Applicability: Model BAe 125–800A series airplanes, as listed in Corporate Jets Limited Service Bulletin SB.25–68–25A440A, dated August 19, 1992; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the forward cabin door from closing during takeoff and landing, which could impede or hinder the ability of passengers and crew to exit through the main entrance door during an emergency evacuation, accomplish the following:

(a) Within 180 days after the effective date of this AD, replace the existing forward cabin door retainer catch assembly located in the upper luggage bay shelf with a new, improved forward cabin door retainer catch assembly, Modification No. 25A440A, in accordance with Corporate Jets Limited Service Bulletin SB.25–68–25A440A, dated August 19, 1992.

(b) As of the effective date of this AD, no person shall install a catch assembly having part number 25–8DP1695 on any airplane.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The replacement shall be done in accordance with Corporate Jets Limited Service Bulletin SB.25–68–25A440A, dated August 19, 1992. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Corporate Jets, Inc., 22070 Broderick Drive, Sterling, Virginia 20166. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on December 20, 1993.

Issued in Renton, Washington, on November 2, 1993.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–27375 Filed 11–18–93; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 520

Oral Dosage Form New Animal Drugs; Chlortetracycline Soluble Powder

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental new animal drug application (NADA) filed by Feed Specialties Co., Inc., that provides for the safe and effective use of chlortetracycline soluble powder in the drinking water of chickens, turkeys, and swine for control and/or treatment of bacterial diseases susceptible to chlortetracycline. The approval reflects compliance with results of the National Academy of Sciences/National Research Council (NAS/NRC), Drug Efficacy Study Group's (DESI) evaluation of the drug's effectiveness and FDA's conclusions concerning that evaluation.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Dianne T. McRae, Center for Veterinary Medicine (HFV–102), Food and Drug Administration, 7500 Standish Pl., Rockville, MD 20855, 301–594–1623.

SUPPLEMENTARY INFORMATION: Feed Specialties Co., Inc., Des Moines, IA

50313, filed a supplement to its approved NADA 65–256 for Chlortet™-Soluble-O (chlortetracycline hydrochloride (CTC HCL) soluble powder). The drug is available in packets containing 25.6 grams of CTC HCL per 7.2 ounces of soluble powder. The drug is used to prepare drinking water containing the following concentrations of CTC HCL: (1) 200 to 400 milligrams per gallon (mg/gal) for control of infectious synovitis in chickens caused by *Mycoplasma synoviae*; (2) 400 to 800 mg/gal for control of chronic respiratory disease and air-sac infections in chickens caused by *M. gallisepticum* and *Escherichia coli*; and (3) 400 mg/gal for control of infectious synovitis in turkeys caused by *M. synoviae*. The drug is also used to medicate drinking water to concentrations producing the following CTC HCL dosages: (1) 25 mg/pound of body weight in turkeys for control of complicating bacterial organisms associated with bluecomb; and (2) 10 mg/pound of body weight in swine for control and treatment of bacterial enteritis caused by *E. coli* and *Salmonella* spp. and bacterial pneumonia associated with *Pasteurella* spp., *Hemophilus* spp., and *Klebsiella* spp. The application was originally approved October 14, 1966.

The drug was the subject of a NAS/NRC DESI evaluation of effectiveness (DESI 0113NV). The findings were published in the **Federal Register** of July 21, 1970 (35 FR 11646). NAS/NRC evaluated the drug as probably effective for growth promotion and feed efficiency and for the treatment of animal diseases caused by pathogens sensitive to chlortetracycline. NAS/NRC stated:

(1) Claims made regarding "for prevention of" or "to prevent" should be replaced with "as an aid in the control of" or "to aid in the control of";

(2) claims for growth promotion or stimulation are disallowed and claims for faster gains and/or feed efficiency should be stated as "may result in faster gains and/or improved feed efficiency under appropriate conditions";

(3) each disease claim should be properly qualified as "appropriate for use in (name of disease) caused by pathogens sensitive to (name of drug)"; if the disease cannot be so qualified the claim must be dropped;

(4) claims pertaining to egg production and hatchability should be changed to "May aid maintaining egg production and hatchability, under appropriate conditions, by controlling pathogenic microorganisms";

(5) the labels should warn that treated animals must actually be consuming enough medicated water or medicated feed to provide a therapeutic dosage under the conditions that prevail and, as a precaution, state the desired oral dose per unit of animal weight per day for each species as a guide to effective usage of the preparation in drinking water or feed; and

(6) effective blood levels are required for each recommended dosage.

FDA concurred with the NAS/NRC findings.

The NAS/NRC evaluation is concerned only with the drug's effectiveness and safety to the treated animal. It does not take into account the safety for food use of food derived from drug-treated animals. Nothing herein will constitute a bar to further proceedings with respect to questions of safety of the drug or its metabolites in food products derived from treated animals.

Feed Specialties Co., Inc., filed a supplemental NADA which revised the labeling of its product in compliance with the results of the NAS/NRC DESI review and FDA's conclusions. The supplemental NADA is approved as of October 15, 1993, and the regulations are amended by revising § 520.445b (21 CFR 520.445b) to reflect the approval. Section 520.445b is further amended by deleting the latter portion of the NAS/NRC statement in paragraph (d)(4) because it has become obsolete since the agency began accepting abbreviated NADA's in 1990 under the Generic Animal Drug and Patent Term Restoration Act of 1988.

The agency has carefully considered the potential environmental effects of this action. FDA has concluded that the action will not have a significant impact on the human environment, and that an environmental impact statement is not required. The agency's finding of no significant impact and the evidence supporting that finding, contained in an environmental assessment, may be seen in the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857, between 9 a.m. and 4 p.m., Monday through Friday.

Under section 512(c)(2)(F)(iii) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b(c)(2)(F)(iii)), this approval for food producing animals does not qualify for marketing exclusivity because the supplemental application does not contain reports of new clinical or field investigations (other than bioequivalence or residue studies) and new human food safety studies (other than bioequivalence or residue studies) essential to the approval and conducted or sponsored by the applicant.

In accordance with the freedom of information provisions of part 20 (21 CFR part 20) and § 514.11(e)(2)(ii) (21 CFR 514.11(e)(2)(ii)), a summary of safety and effectiveness data and information submitted to support approval of this application may be seen in the Dockets Management Branch (address above) between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 520

Animal drugs.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR part 520 is amended as follows:

PART 520—ORAL DOSAGE FORM NEW ANIMAL DRUGS

1. The authority citation for 21 CFR part 520 continues to read as follows:

Authority: Sec. 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b).

2. Section 520.445b is amended in paragraph (b) by revising the heading and by adding the words "; No. 017274 for conditions of use as in paragraphs (d)(4)(i) through (d)(4)(iii) of this section" before the period at the end of the paragraph, and by revising the introductory text of paragraph (d)(4) to read as follows:

§ 520.445b Chlortetracycline powder [chlortetracycline hydrochloride or chlortetracycline bisulfate].

* * * * *

(b) *Sponsors.* * * *

* * * * *

(d) * * *

(4) The following uses of chlortetracycline hydrochloride in drinking water were reviewed by the National Academy of Sciences/National Research Council (NAS/NRC) and found effective:

* * * * *

Dated: November 8, 1993.

Robert C. Livingston,

Director, Office of New Animal Drug Evaluation, Center for Veterinary Medicine.

[FR Doc. 93–28473 Filed 11–18–93; 8:45 am]

BILLING CODE 4160-01-F

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21 CFR Parts 520 and 526

Animal Drugs, Feeds, and Related Products; Change of Sponsor

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect a change of sponsor for five new animal drug applications (NADA's) from Solvay

Animal Health, Inc. to Norbrook Laboratories, Ltd.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Benjamin A. Puyot, Center for Veterinary Medicine (HFV–130), Food and Drug Administration, 7500 Standish Pl., Rockville, MD 20855, 301–594–1646.

SUPPLEMENTARY INFORMATION: Solvay Animal Health, Inc., 1201 Northland Dr., Mendota Heights, MN 55120, has informed FDA that it has transferred ownership of, and all rights and interests in, the following approved NADA's to Norbrook Laboratories, Ltd., Station Works, Newry BT 35 6JP, Northern Ireland:

NADA Number	Ingredient	Trade Name
055–036	Ampicillin Trihydrate Capsules	Principlin
055–050	Ampicillin Trihydrate Soluble Powder	Principlin Soluble Powder
055–058	Ampicillin Trihydrate Boluses	Principlin Bolus
055–061	Ampicillin for Oral Suspension	Principlin 125
055–068	Cloxacillin Benzathine	Bovicloxi

Accordingly, the agency is amending the regulations in 21 CFR parts 520.90c(b), 520.90d(b), 520.90e(b), 520.90f(b) and 526.464b(c) to reflect the change of sponsor.

List of Subjects

21 CFR Part 520

Animal drugs.

21 CFR Part 526

Animal drugs.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR Parts 520 and 526 are amended as follows:

PART 520—ORAL DOSAGE FORM NEW ANIMAL DRUGS

1. Authority citation for 21 CFR part 520 continues to read as follows:

Authority: Sec. 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b).

§ 520.90c [Amended]

2. Section 520.90c *Ampicillin trihydrate capsules* is amended in paragraph (b) by removing "053501" and adding in its place "055529".

§ 520.90d [Amended]

3. Section 520.90d *Ampicillin trihydrate for oral suspension* is amended in paragraph (b) by removing "053501" and adding in its place "055529".

§ 520.90e [Amended]

4. Section 520.90e *Ampicillin trihydrate soluble powder* is amended in paragraph (b) by removing "053501" and adding in its place "055529".

§ 520.90f [Amended]

5. Section 520.90f *Ampicillin trihydrate boluses* is amended in paragraph (b) by removing "053501" and adding in its place "055529".

PART 526—INTRAMAMMARY DOSAGE FORMS

6. The authority citation for 21 CFR part 526 continues to read as follows:

Authority: Sec. 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b).

§ 526.464b [Amended]

7. Section 526.464b *Cloxacillin benzathine for intramammary infusion, sterile* is amended in the introductory text of paragraph (c) by removing "53501" and adding in its place "055529".

Dated: November 12, 1993.

Robert C. Livingston,

Director, Office of New Animal Drug Evaluation, Center for Veterinary Medicine.

[FR Doc. 93–28474 Filed 11–18–93; 8:45 am]

BILLING CODE 4160–01–F

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Secretary

24 CFR Part 4

[Docket No. R–93–1491; FR–2805–F–04]

RIN 2501–AB02

Prohibition of Advance Disclosure of Funding Decisions; Amendments

AGENCY: Office of the Secretary, HUD.

ACTION: Final rule.

SUMMARY: This rule finalizes an interim rule to clarify certain of the non-disclosure requirements of section 103 of the Department of Housing and Urban Development Reform Act of 1989, and to further elaborate on the circumstances to which section 103 applies. The purpose of section 103 and the Department's regulations, which implement section 103 is to avoid unfair competition, by controlling the flow and timing of information concerning the competition.

EFFECTIVE DATE: December 20, 1993.

FOR FURTHER INFORMATION CONTACT: Office of Ethics, room 2158, Department of Housing and Urban Development, 451 Seventh Street, SW., Washington, DC 20410, telephone number (202) 708–3815 (voice/TDD). (This is not a toll-free number.)

SUPPLEMENTARY INFORMATION:

Background

Section 103 of the Department of Housing and Urban Development Reform Act (42 U.S.C. 3537a) (section 103) proscribes the communication of certain information by Department employees to persons not authorized to receive that information during the selection process for the award of assistance by the Department. The specific information with which section 103 is concerned is addressed in the Department's rule implementing section 103, codified at 24 CFR part 4. This information, referred to as "covered selection information" in part 4, is defined to mean "information: (1) That is required by statute, regulation, or order to be confidential; (2) that is contained in an application or request for assistance; and (3) that is otherwise used in arriving at the Secretary's decision to make assistance available, unless that information is generally available to the public." (See 24 CFR 4.5.) The objective of section 103, and 24 CFR part 4, is to preclude any person from receiving or obtaining information from the Department that would give an applicant an unfair advantage over other applicants who are competing for financial assistance.

In issuing the 24 CFR part 4 final rule published May 13, 1991 (56 FR 22088), the Department believed that the rule's provisions were sufficient to meet the objective of section 103 without inhibiting the exchange of information that serves the purpose of the individual HUD-funded program and the overall objective of the agency. However, during the Federal Fiscal Year 1991 funding cycle, questions about section

103 and the part 4 rule were raised that suggested that the language of part 4 could be misinterpreted to hinder HUD employees in providing or obtaining information necessary to the performance of their responsibilities during the selection process. Additionally, the Department's experience with implementation of certain provisions of part 4 revealed that some disclosures that were clearly intended to be prohibited by section 103 might be interpreted as being permitted. Accordingly, an interim rule was published on August 4, 1992 (57 FR 34246) to address these problems.

This interim rule amended 24 CFR part 4 to clarify that the non-disclosure provisions of section 103 apply to potential applicants for assistance before the deadline for submission of applications. The interim rule also amended 24 CFR part 4 to clarify that providing technical assistance to HUD employees, and obtaining technical assistance from HUD employees, during the selection process are legitimate program functions. Additionally, the August 4, 1992 interim rule addressed two instances when certain restrictions of 24 CFR part 4 do not apply. The first involves the situation in which there is no competitive distribution of funds. The second involves the situation in which there is no competitive advantage to be gained from a disclosure of designated information after a certain stage in the selection process.

Public comments were solicited on the August 4, 1992 interim rule. No comments were received by the expiration of the comment deadline on October 5, 1992. Accordingly, the Department adopts as its final rule and without changes, the interim rule published on August 4, 1992.

Other Matters

Environmental Impact

This rule is categorically excluded from the requirements of the National Environmental Policy Act of 1969 by 24 CFR 50.20(k) because it relates to internal administrative procedures whose content does not constitute a development decision nor affect the physical condition of project areas or building sites.

Executive Order 12866

This final rule was reviewed by the Office of Management and Budget as a significant regulatory action under Executive Order 12866.

Impact on Small Entities

The Secretary, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed and approved this rule, and, in so doing, certifies that this rule will not have a significant economic impact on small entities. The focus of 24 CFR part 4, and of the amendments made to part 4 by this rule, is with the regulation of certain conduct by HUD employees and by applicants for HUD assistance during the selection process for the award of financial assistance by HUD. Part 4 provides for the imposition of sanctions on HUD employees and applicants for HUD assistance determined to have engaged in prohibited conduct. These sanctions are not directed at small entities *per se*.

Impact on the Family

The General Counsel, as the Designated Official under Executive Order 12606, The Family, has determined that this rule does not have potential for significant impact on family formation, maintenance, and general well-being, and, thus, is not subject to review under the Order. This rule is solely concerned with certain kinds of conduct by HUD employees and by applicants during the selection process for the award of financial assistance by HUD. No change in existing HUD policies or programs will result from promulgation of this rule, as those policies and programs relate to family concerns.

Federalism Impact

The General Counsel, as the Designated Official under section 6(a) of Executive Order 12612, Federalism, has determined that the policies contained in this rule will not have substantial direct effects on States or their political subdivisions, or on their relationship with the Federal government, or on the distribution of power and responsibilities between them and other levels of government. The focus of 24 CFR part 4, and of the amendments made to part 4 by this rule, is with the regulation of certain conduct by HUD employees and by applicants for HUD assistance during the selection process for the award of financial assistance by HUD. The rule primarily will affect HUD employees.

Regulatory Agenda

This rule was listed as sequence number 1462 in the Department's Semiannual Agenda of Regulations published on October 25, 1993 (58 FR 56402, 56414) in accordance with Executive Order 12866 and the Regulatory Flexibility Act.

List of Subjects in 24 CFR Part 4

Administrative practice and procedure, Government employees, Grant programs—housing and community development, Investigations, Loan programs—housing and community development, Penalties, Reporting and recordkeeping requirements.

Accordingly, the Department adopts as final and without change, the interim rule published on August 4, 1992 (57 FR 34246) that amended 24 CFR part 4.

Dated: November 4, 1993.

Henry G. Cisneros,

Secretary.

[FR Doc. 93–28386 Filed 11–18–93; 8:45 am]

BILLING CODE 4210–32–P

Office of the Assistant Secretary for Housing-Federal Housing Commissioner

24 CFR Part 208

[Docket No. R–93–1691; FR–3521–I–01]

RIN No. 2502–AG16

Electronic Transmission of Required Data for Certification and Recertification and Subsidy Billing Procedures for Multifamily Subsidized Projects

AGENCY: Office of the Assistant Secretary for Housing—Federal Housing Commissioner, HUD.

ACTION: Interim and final rule.

SUMMARY: This rule requires owners of subsidized multifamily projects to submit certain data electronically to HUD in a HUD prescribed format. Electronic transmission is necessary because the manual submission of HUD forms has become a burden to project owners, managers and HUD.

The final rule portion applies to HUD-administered multifamily subsidized projects under the following programs: the Section 236 Interest Reduction and Rental Assistance Payments program, the Section 8 Housing Assistance Payments Program (except the Section 8 Existing Housing Program or the Moderate Rehabilitation Program), the Section 221(d)(3) Below Market Interest Rate Loan program, and the Section 101 Rent Supplement Payment program.

The interim rule portion applies to projects under the following programs: The Section 202 program (except section 202/8 projects), the Section 811 Supportive Housing for Persons with Disabilities program, and subsidized multifamily projects where State housing finance and development agencies and other Public Housing Agencies are the Contract Administrators.

DATES: Effective Date: This rule is effective May 20, 1994, except for § 208.108(b) which is not effective until March 21, 1994; and § 208.108 (c) and (d) which will become effective only as provided by subsequent Notice published in the **Federal Register.**

Comment due date for the interim portion of the rule (§§ 208.108(c) and 208.108(d)): January 18, 1994.

ADDRESSES: Comments on the interim portion of this rule may be submitted to the Rules Docket Clerk, Office of General Counsel, room 10276, Department of Housing and Urban Development, 451 Seventh Street, SW., Washington, DC 20410. Late filed comments will be considered to the extent practicable. Communications should refer to the above docket number and title. A copy of each communication submitted will be available for public inspection between 7:30 a.m. and 5:30 p.m. at the above address. Facsimile (FAX) comments are not acceptable.

FOR FURTHER INFORMATION CONTACT: James J. Tahash, Director, Planning and Procedures Division, Office of Multifamily Housing Management, room 6182, Department of Housing and Urban Development, 451 Seventh Street, SW., Washington, DC 20410, telephone (202) 708–3944. Hearing or speech-impaired individuals may call HUD's TDD number (202) 708–4594. (These telephone numbers are not toll-free.)

SUPPLEMENTARY INFORMATION:

I. Paperwork Burden

The information collection requirements contained in this rule have been submitted to the Office of Management and Budget (OMB) for review under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501–3520). No person may be subjected to a penalty for failure to comply with these information collection requirements until they have been approved and assigned an OMB control number. The OMB control number, when assigned, will be announced by separate notice in the **Federal Register.**

The public reporting burden for the collection of information requirements contained in this rule is estimated to include the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Information on the estimated public reporting burden is provided under the Preamble heading, *Other Matters.* Send comments regarding this burden estimated or any other aspect of this collection of information, including suggestions for reducing this burden, to the Department of Housing and Urban Development, Rules Docket Clerk, 451 Seventh Street, SW., room 10276, Washington, DC 20410–0500; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for HUD, Washington, DC 20503.

II. Background

In 1983 and 1985, legislative changes were made that significantly changed and complicated tenant rent calculations. As a result, the Department published a proposed rule on June 6, 1988 (53 FR 20649), which would require owners of some HUD-administered multifamily subsidized projects to electronically submit the following forms: Form HUD–50059, Owner's Certification of Compliance with HUD's Tenant Eligibility and Rent Procedures; Form HUD–50059 Worksheets to Compute Tenant Payment/Rent; Form HUD–52670, Housing Owner's Certification and Application for Housing Assistance Payments; and Form HUD–52670A Part 1, Schedule of Tenant Assistance Payments Due.

These HUD forms have been updated since 1988, and in some cases the information collected in a form has been moved to a new form. Although the information collected has not changed, the HUD form numbers and titles have changed. Accordingly, in this rule, the list of forms covered in this rule also includes: HUD–52670A Part 2, Schedule of Section 8 Special Claims; and HUD–52671A through D, Section 8 Special Claims for Unpaid Rent/Damages, Vacancies During Rent-Up, Regular Vacancies, and Debt Service.

The programs covered in the proposed rule published in June 1988, and in the final portion of today's rule are HUD administered multifamily subsidized projects under: the section 236 Interest Reduction and Rental Assistance Payments Program; the section 8 Housing Assistance Payments Programs, including, but not limited to, section 8 Housing Assistance Payments Program for New Construction (24 CFR part 880), section 8 Housing Assistance Payments Program for Substantial Rehabilitation (24 CFR part 881), section 8 Housing Assistance Payments Program, New Construction Set-Aside for section 515 Rural Rental Housing Projects (24 CFR part 884), Loans for Housing for the Elderly or Handicapped (24 CFR part 885), and section 8 Loan Management and Property Disposition Set-aside program (24 CFR part 886); the section 221(d)(3) Below Market Interest Rate program; and the section 101 Rent Supplement program.

In the proposed rule, the listing of section 8 Housing Assistance Payments Programs did not include the section 8 Housing Assistance Payments Program for New Construction (24 CFR part 880), the section 8 Housing Assistance Payments Program for Substantial Rehabilitation (24 CFR part 881), the section 8 Housing Assistance Payments Program—New Construction Set-Aside for section 515 Rural Rental Housing Projects (24 CFR part 884), and the section 8 Loan Management and Property Disposition Set-aside (24 CFR part 886). The list was not intended to be an exhaustive listing of all section 8 Housing Assistance Payments Programs; however, for clarification, in this rule the list is expanded to specifically reference these programs.

As stated in the proposed rule, this rule changes the way in which the data is transmitted to HUD from a paper mode to an electronic mode. Electronic transmission and processing are necessary because these HUD forms have become a burden both to the project owners and managers, and HUD. Owners and managers have the time consuming task of completing the calculations and computations which are prone to error, and when errors are found by HUD, retroactive changes and subsidy adjustments are required. The burden to HUD results from insufficient HUD staff to perform the time consuming task of reviewing 100 percent of the forms in a timely manner to verify the accuracy and completeness of the information.

One of the primary concerns to HUD and the project owner and manager is the accuracy of the rent computations and the subsidy billings. To address these concerns, several years ago the Department began to develop a computer system to collect all rental assistance data and ensure the accuracy of subsidy payments. This system serves as the basis for the Department's electronic data transmission requirements in lieu of hard copy. The resulting system is called the "Tenant Rental Assistance Certification System," or TRACS.

In June of 1992, the Department implemented a pilot program involving two management agents. In this pilot program the Department began the data collection portion of TRACS. The Department extended the pilot program to project owners and management agents in Region III (Philadelphia) in November of 1992, and Region VIII (Denver) in December of 1992. By July of 1993, the Department extended the pilot program to the remaining regions:

Region IV (Atlanta), Region VI (Fort Worth), Region V (Chicago), Region VII (Kansas City), Region II (New York), Region I (Boston), Region X (Seattle), and Region IX (San Francisco).

In the pilot program, the Department encouraged program participants to begin transmitting data electronically to HUD. Participants in the pilot program in Regions III and VIII were given the option of either sending copies of the certifications to HUD for data entry, or electronically submitting the data. Participants in the remaining regions electronically submit the necessary data. Each program participant continues to submit and correct the changed certifications and recertifications on a monthly basis and builds an accurate database for each project over a one-year timetable. The time spent by participants in initiating electronic transmission and making corrections to the data submissions is offset by future savings in the recertification process and monthly subsidy billings, as well as increased accuracy and speed associated with the certification and recertification process, and the reduced number of HUD adjustments and paperwork required by these adjustments. The Department believes that the implementation of the pilot program on a staged basis prior to this rule will help ensure the development of an orderly, timely and effective national database.

A. Final Rule

In the final portion of this rule, owners and agents covered by the proposed rule who currently use automated software packages to process certifications and recertifications and provide subsidy billings to HUD are required to update their software packages and begin electronic transmission of that information by March 21, 1994. It is important for owners and agents in this group (i.e. those who are already automated) to note that while some software packages currently print on the appropriate HUD forms or facsimiles, these software packages may not allow an electronic transmission in accordance with HUD specifications. An electronic transmission consists of information from those forms which is organized into various categories or actions and transmitted in an ASCII fixed format (not field delimited). These fixed format ASCII files will deliver the data with the field lengths as specified by HUD in a user's guide which has already been provided to each project.

Nonautomated owners and agents (i.e., those who currently prepare the certification, recertification, and subsidy billing manually) should immediately begin to obtain information on the cost of purchasing hardware or software, or both, to determine whether it is financially feasible to purchase these items or whether these project owners and managers should contract out the electronic transmission of certifications, recertifications and subsidy billings to another entity. These owners and agents must: complete the search and either purchase the necessary hardware or software, or sign service contracts, complete their data loading, and begin electronic transmission by May 20, 1994.

Owners and agents subject to the final portion of this rule may voluntarily participate after December 20, 1993 if they so desire. The Department encourages program participants to begin electronic transmission as soon as the capability exists. An earlier transmission will allow time for owners of these projects to correct errors found during the data load into the automated software. These corrections will help minimize the number of errors found when formerly manual certifications enter the Department's TRACS system, as well as help minimize an initial surge of certifications into the TRACS system itself from the number of currently nonautomated projects.

While owners of section 221(d)(3) BMIR projects have not been required to submit a form HUD 50059 for a number of years, this final rule requires those owners to submit an automated form HUD 50059 for all tenants. This final rule implements similar changes for the section 236 program as well. Currently, owners of section 236 projects submit the form HUD 50059 for all tenants receiving assistance payments (i.e., section 8, Rent Supplement, and Rental Assistance Payments). Owners of these projects submit the form HUD 50059 for tenants who do not receive section 8, Rent Supplement, or RAP (i.e., those who pay less than market rent) only if required by the HUD field office or the contract administrator. This final rule requires owners of section 236 projects to submit the form HUD 50059 for tenants paying less than market rent as well as tenants paying an assisted rent under section 8, Rent Supplement or RAP.

Finally, in addition to electronically submitting data to HUD following the effective date of the rule, owners and agents are required by this final rule to electronically transmit tenant data for the 12 months preceding the effective date of the rule. (See paragraph H under "other matters" for the justification for this retroactive implementation.)

B. Interim Rule

The interim portion of this rule applies to all remaining subsidized section 202 projects, which include: Section 202 projects with rent supplement or loan management set aside, section 202 projects with section 162 assistance, and section 202 Supportive Housing for the Elderly. In the case of partially assisted section 202 projects, owners are required to electronically transmit data only for those units receiving Rent Supplement or section 8.

The interim rule also applies to section 811 Supportive Housing for Persons with Disabilities projects, and subsidized multifamily projects where State housing finance and development agencies and other Public Housing Agencies are the Contract Administrators.

The programs covered by the interim portion of this rule are added to this rule today since they are now included in HUD's TRACS system. However, the Department has suspended the effective date of the interim portion of the rule to give these previously uncovered groups enough time to prepare for automation. The Department will in the near future publish a Notice of Effective Date in the Federal Register to establish a date for electronic transmission by groups covered by the interim portion of this rule. This effective date will not be before May 20, 1994. However, owners, management agents and contract administrators subject to the interim rule may voluntarily participate after December 20, 1993 if they so desire, and the Department encourages early program participation. An earlier transmission will allow time for these projects to correct errors found during the data load into the automated software. These corrections will help minimize the number of errors found when these groups are later required to begin electronic transmission, as well as help minimize an initial surge of certifications into the TRACS system itself from the number of currently nonautomated projects.

As with the final rule, groups subject to the interim portion of the rule will also be required to transmit tenant data for the 12 months preceding the effective date of the interim rule. (See paragraph H under "other matters" for the justification for this retroactive implementation.)

The Department is seeking comments for the interim portion of today's rule. The Department is particularly interested in comments from contract administrators (State housing finance and development agencies and other

Public Housing Agencies), and will carefully consider these comments in developing the final rule.

Finally, the phasing in of the various categories of project owners in this rule is accomplished by establishing different categories in § 208.104 (entitled "Applicability") and § 208.108 (entitled "Requirements"). When the interim portion of this rule is published as a final rule, the Department will eliminate the categories in §§ 208.104 and 208.108 since they will no longer be necessary or useful.

III. Discussion of Public Comments From Proposed Rule

The Department received 65 public comments and one comment from a HUD Field Office on the proposed rule. The commenters included: the Farmers Home Administration of the Department of Agriculture, information system companies, an association of HUD management agents, a national leased housing association, a State association of homes and services for the aging, and numerous management companies. Most commentators were favorable to the rule, although many expressed concern with some aspect of the rule. As a result of these comments, the Department has made some revisions to the proposed rule which are incorporated in this interim and final rule. The following discussion summarizes the comments and provides HUD's responses to those comments. Every comment was reviewed and considered, although it may not be specifically addressed in this preamble.

A. Timeframe

A large number of commentators asserted that six months was not a reasonable timeframe to enable them to purchase the necessary equipment, have their staff properly trained, and correct the problems that arise with any new computer system. These commentators suggested that HUD extend the timeframe for implementation from a period of 12 to 18 months, with 12 months to test the system and reduce or eliminate errors, and an additional 6 months for full implementation.

The Department has carefully considered these comments, and has decided to give owners who are currently automated four months to update the software, and begin electronic transmission. For project owners who are not currently automated, the rule provides for six months to prepare for electronic transmission. Since 1988 many project owners have acquired computers and become automated. As result of the pilot program and discussions with the industry over the ensuing years since publication of the proposed rule, many project owners are already prepared for electronic transmission. Moreover, the Department is aware of at least four computer vendors with completed software packages designed for electronic transmission of the required data to HUD. While a longer timeframe may have been appropriate five years ago, today it is no longer appropriate.

B. Costs Attributable to This Electronic System

Several commentators criticized the Department's limitation on the costs of automating the electronic transmission of data, including the cost of purchasing and maintaining computer hardware or software, or both, or the cost of contracting for such services, to front line activities of certification, recertification and subsidy billings. This regulation encompasses only certification, recertification and subsidy billings, and, therefore, can only authorize costs for those functions. However, good business practices dictate that Field Offices will authorize other computer costs on a case-by-case basis when processing future rent increase requests.

C. Cost Effectiveness

In response to public comments questioning the point at which automation/electronic transmission is not cost effective, the Department has reconsidered and changed the manner in which we will determine cost effectiveness. The Department anticipates that the large number of vendors competing in the marketplace will cause the cost of automation/electronic transmission to be reasonable, and a greater number of owners will therefore be able to purchase and maintain their own equipment at each project site. However, the decision to purchase and maintain the necessary equipment and services at each project site, or at a central location, or to contract for the automation/electronic transmission function, will only be made by each project owner.

The Department will not establish a formula for owners to follow in their deliberations of choosing between contracting out for automation/electronic transmission versus purchasing hardware and software for automation/electronic transmission.

D. Exemptions to Computer Automation

The proposed rule sought comments on the advisability of granting exceptions to the rule's applicability where a project owner could show it was not cost effective to automate and electronically transmit the required data to HUD. Many commentators recommended that the Department exempt small project owners. The commentators varied on what would be considered a small project owner, with some suggesting fewer than 100 units, some suggesting fewer than 50 units, and some suggesting fewer than 25 units.

The Department has decided not to provide any exemption in the regulations. One of the commentators to the proposed rule stated that based upon its experience, there is no conceivable situation where automation through a service organization is not cost effective, even for smaller projects. For smaller projects and partially assisted projects with few subsidized units, there are several organizations nationwide that prepare the HUD paperwork for many projects on a monthly basis for a per unit fee. These organizations, like software vendors, are completing their system updates to comply with the Department's electronic transmission criteria. Additionally, local management agents, local management associations and management agents with centralized facilities have indicated a desire to act as service organizations for smaller projects and partially assisted projects in their locale. Finally, since 1988, the price of computer hardware has dropped dramatically, making it possible even for smaller project owners and partially assisted project owners to afford computers.

One of HUD's objectives with this rule is to improve overall project management. Another goal of this rule is to assist the Department in maintaining accurate records of all outstanding HUD assistance obligations for future appropriation requests from Congress. These goals cannot be met if the Department exempts smaller project owners.

While the Department would prefer each project to obtain its own hardware and software, owners may elect either to contract out or centralize the electronic transmission function. However, when owners and managers of smaller or partially assisted projects contract out the electronic transmission function, or when owners of multiple projects centralize the transmission function, they are required to continue to retain the ability to monitor the day-to-day operations of the project at the project site and be able to demonstrate that ability to the relevant HUD Field Office.

E. Form of Data Transmittal

Many commentators criticized the proposed rule for requiring transmission

on a 5¼ inch floppy disk. The commentators suggested that the Department accept other forms of data transmittal, including the use of magnetic tape, modems and 3½ inch disks. The Department agrees with these commentators. The Department is now capable of accepting electronic transmission through several media. Actual electronic transmission may be in one of several media types: the electronic network via modem, 5¼ inch or 3½ inch floppy disks, or magnetic tape.

F. Nonconforming Software

Some commentators complained that they had spent considerable amounts of time, money, and effort developing automated programs that do not currently meet the HUD electronic transmission format specifications. The Department cannot tailor its electronic data specifications to the individual needs of project owners and management companies. These programs must be adapted to comply with the HUD electronic transmission format specifications. Owners can design one or more system interfaces, purchase existing software or reprogram their existing systems to comply with the HUD electronic transmission format specifications.

G. Sources of Funds

Many respondents requested the ability to cost out these expenses through releases from the Replacement Reserve Account, as a project expense to be paid out of project income, or as an expense to be reflected in the annual financial statement and ultimately part of a rent increase.

These respondents have legitimate concerns which have been carefully considered by the Department. In response to these concerns, the Department has determined that these expenses may be borne out of project operating costs and paid out of project income, part of a rent increase, released as a loan from the Replacement Reserve Account, or released from the Residual Receipts Account. Should the Replacement Reserve Account become the project's main source of funds in purchasing the hardware or software, or both, these funds are expected to be repaid within a five year period. (See 208.112 (c) and (d)).

H. Miscellaneous

A series of other comments concerned issues such as logistics, potential owner/manager staffing problems, cooperation between owners, managers and vendors, and procedures for granting extensions or waivers. Where it is appropriate, such issues will be discussed in training sessions, or through written instructions in the form of notices or handbook revisions.

I. Withdrawal of the Use of the Term "HUD Approved Vendor"

Due to the significant legislative changes which complicated the tenant rent computations in 1983 and 1985, the Department established procedures for approving systems which automated rent computations and billings and allowed automation costs as eligible project expenses. Because the Department has revised the manner in which the data requirements are transmitted to HUD by owners from a paper mode to an electronic transmission, we are withdrawing the use of the term "HUD approved vendor". That terminology applied to those software vendors who submitted software packages for HUD review of the accuracy and compliance with HUD standards under testing standards in 1983 or 1985. That approval process is no longer in effect. Therefore, the term "HUD Approved Vendor" is no longer authorized.

III. Other Matters

A. Executive Order 12866

This rule was reviewed by the Office of Management and Budget (OMB) under Executive Order 12866 on Regulatory Planning and Review, issued by the President on September 30, 1993. Any changes made in this rule subsequent to its submission to OMB are identified in the docket file, which is available for public inspection as provided under the section of this preamble entitled "Addresses."

B. Environmental Impact

In accordance with 40 CFR 1508.4 of the regulations of the Council on Environmental Quality and 24 CFR 50.20(k) of the HUD regulations, the policies and procedures contained in this rule relate only to HUD administrative procedures and, therefore, are categorically excluded from the requirements of the National Environmental Policy Act.

C. Executive Order 12612, Federalism

The General Counsel, as the Designated Official under section 6(a) of Executive Order 12612, Federalism, has determined that the policies contained in this rule will not have substantial direct effects on states or their political subdivisions, or the relationship between the Federal government and the states, or on the distribution of power and responsibilities among the various levels of government. Specifically, this rule is directed to owners of multifamily housing projects, and will not impinge upon the relationship between the Federal Government and State and local governments. As a result, the rule is not subject to review under the order.

D. Executive Order 12606, the Family

The General Counsel, as the Designated Official under Executive Order 12606, The Family, has determined that this rule does not have potential for significant impact on family formation, maintenance, and general well-being, and, thus, is not subject to review under the order. No significant change in existing HUD policies or programs will result from promulgation of this rule, as those policies and programs relate to family concerns.

E. Regulatory Flexibility Act

The Secretary, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)) has reviewed and approved this rule, and in so doing certifies that this rule will not have a significant economic impact on a substantial number of small entities. Because this rule changes the way in which the data is transmitted to HUD, and all costs associated with implementation of the electronic transmission will be considered project operating costs, the rule is not expected to have a significant economic impact.

F. Regulatory Agenda

This rule was not listed in the Department's Semiannual Agenda of Regulations published on October 25, 1993 (58 FR 56402) under Executive Order 12866 and the Regulatory Flexibility Act, and therefore was submitted to the Committee on Banking, Housing and Urban Affairs of the Senate and the Committee on Banking, Finance and Urban Affairs of the House of Representatives under section 7(o) of the Department of Housing and Urban Development Act.

G. Justification for Interim Rulemaking

In general, the Department publishes a rule for public comment before issuing a rule for effect, in accordance with its own regulations on rulemaking, 24 CFR part 10. However, part 10 does provide for exceptions from that general rule where the agency finds good cause to omit advance notice and public participation. The good cause requirement is satisfied when prior public procedure is "impracticable, unnecessary, or contrary to the public interest." (24 CFR 10.1) The Department finds that good cause exists to publish

the interim portion of this rule for effect without first soliciting public comment, in that prior public procedure is contrary to public interest because the Department needs a computer tracking system to accurately determine the amount of appropriations necessary to satisfy outstanding federal housing obligations.

H. Justification for Retroactivity

The Department has several compelling reasons to require owners to submit tenant data for the 12 months preceding the effective date of this rule. Collecting tenant data electronically for the 12 months preceding the effective date of the rule will allow the Department to provide Congress with accurate budget estimates, and will allow the Department to accurately forecast its contract needs, thus eliminating the possibility in the future of having to request large increases in amendment money. Under the present manual system, the Department cannot accurately project these needs and, therefore, must rely on sizable, unpredictable amendments to contracts.

The retroactive requirement will also allow field offices to redirect their limited resources through Headquarters' determinations of amendment needs. The Department currently determines its amendment needs each year by requesting field offices to analyze and justify their individual needs. When TRACS is fully operational, it will provide for electronic transfer of tenant data and billing information to Headquarters, and identify amendment needs, thus eliminating this staff intensive analysis by field offices.

Finally, by collecting tenant data retroactively, the Department will be able to implement the cross-check of tenant incomes reported on the tenant certifications and recertifications with data kept by Federal and state agencies, and will be able to assure accurate payments to owners. Under the current system owners prepare vouchers which are manually reviewed by HUD. The HUD Inspector General has identified that some field offices, due to staffing shortages, either cannot perform these reviews or they perform them months after the billings are submitted. The automated system will assure accurate billings and will allow field offices to redirect their resources. This retroactive provision means that when this regulation becomes effective, TRACS will have full data capability, allowing the Department immediately to accurately project budget needs and fully monitor assistance payments. Without this retroactive implementation, these benefits of TRACS will not be fully realized until one year following the effective date of this rule.

I. Paperwork Reduction Act

The information collection requirements contained in section 208.108 in this rule have been submitted to the Office of Management and Budget under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501–3520). In accordance with OMB regulations, the following chart is provided to describe the collection of information requirements.

Description Electronic transfer of information	Number of respondents	Responses per respondent	Total annual response	Minutes per response	Hours per response	Total hours
FY '93	2,106,118	1	2,106,118	55	0.916666	1,930,608
	65,138	1	65,138	65	1.083333	70,566
						2,001,174
FY '94	2,127,831	1	2,127,831	55	0.916666	1,950,512
	43,425	1	43,425	65	1.083333	47,043
						1,997,556
FY '95	2,149,543	1	2,149,543	55	0.916666	1,970,414
	21,713	1	21,713	65	1.083333	23,522
						1,997,556
FY '96	2,149,543	1	2,149,543	55	0.916666	1,970,414
	21,713	1	21,713	65	1.083333	23,522
						2,997,556

Average annual burden hours for FY 1993–1996 is: 2,003,634.

The total cost to the respondent based on an average of 2,003,634 annual hours at a manager's pay scale of $10.00 per hour (which includes labor and overhead) is estimated at $20,036,340.

List of Subjects in 24 CFR Part 208

Computer technology: automatic data processing, Data processing, Electronic data processing, Subsidies: grant programs, rent subsidies.

Accordingly, title 24, chapter II, of the Code of Federal Regulations is amended by adding a new part 208 to read as follows:

PART 208—ELECTRONIC TRANSMISSION OF REQUIRED DATA FOR CERTIFICATION AND RECERTIFICATION AND SUBSIDY BILLING PROCEDURES FOR MULTIFAMILY SUBSIDIZED PROJECTS

Sec.

208.101 Purpose.
208.104 Applicability.
208.108 Requirements.
208.112 Cost.

Authority: 12 U.S.C. 1701s, 1715l, 1715z–1; 42 U.S.C. 1437f and 3535(d).

§ 208.101 Purpose.

The purpose of this part is to require owners of subsidized multifamily projects to electronically submit certain data to HUD for the programs listed in § 208.104. This electronically submitted data is required by HUD Forms, Owner's Certification of Compliance with Tenant's Eligibility and Rent Procedure, Worksheets to Compute Tenant Payment/Rent (Form HUD–50059 and 50059 Worksheets), and the Monthly Subsidy Billing Forms, Housing Owner's Certification and Application for Housing Assistance Payments (HUD–52670), Schedule of Tenant Assistance Payments Due (HUD–52670A, Part 1), Schedule of section 8 Special Claims (HUD–52670A, Part 2), and Special Claims Worksheets, HUD–52671 A through D), as applicable.

§ 208.104 Applicability.

(a) This part applies to HUD administered subsidized multifamily projects, either insured or non-insured, under:

(1) The section 236 Interest Reduction and Rental Assistance Payments program;

(2) The section 8 Housing Assistance Payments Programs, including, but not limited to, section 8 Housing Assistance Payments Programs for New Construction (24 CFR part 880), section 8 Housing Assistance Payments Program for Substantial Rehabilitation (24 CFR part 881), section 8 Housing Assistance Payments Program, New Construction Set-Aside for section 515 Rural Rental Housing Projects (24 CFR part 884); Loans for Housing for the Elderly or Handicapped (24 CFR part 885) and section 8 Loan Management and Property Disposition Set-aside program (24 CFR part 886);

(3) The section 221(d)(3) Below Market Interest Rate Housing for Low and Moderate Income Mortgage Insurance program (24 CFR part 221); and

(4) The section 101 Rent Supplement program (24 CFR part 215).

(b) This part applies to those multifamily projects having subsidy contracts, either insured or non-insured, where State housing finance and development agencies and other Public Housing Agencies are the subsidy contract administrator under:

(1) The section 236 Interest Reduction and Rental Assistance Payments program (24 CFR part 236);

(2) The section 8 Housing Assistance Payments Programs, including, but not limited to, section 8 Housing Assistance Payments Program for New Construction (24 CFR part 880), section 8 Housing Assistance Payments Program for Substantial Rehabilitation (24 CFR part 881), and section 8 Housing Assistance Payments Program, New Construction Set-Aside for section 515 Rural Rental Housing Projects (24 CFR part 884);

(3) The section 221(d)(3) Below Market Interest Rate Housing for Low and Moderate Income Mortgage Insurance Program (24 CFR part 221); and

(4) The section 101 Rent Supplement program (24 CFR part 215).

(c) This part applies to all other subsidized section 202 projects, which include: section 202 projects with rent supplement or loan management set aside, section 202 projects with section 162 assistance, and section 202 Supportive Housing for the Elderly. This part also applies to section 811 Supportive Housing for Persons With Disabilities.

(d) This part does not apply to the section 8 Existing Housing Program or the Moderate Rehabilitation program.

§ 208.108 Requirements.

(a) Project owners of applicable projects under § 208.104(a) who currently use an automated software package to process certifications and recertifications and to provide subsidy billings to HUD must update their software packages and begin electronic transmission of that data in a HUD specified format by March 21, 1994. These project owners are required to transmit data collected for the 12 months preceding March 21, 1994, as well as data collected on or after this date.

(b) Nonautomated project owners and agents (those owners and agents that currently prepare the certification, recertification, and subsidy billing forms manually) of applicable projects under § 208.104(a) must:

(1) Complete the search and either obtain the necessary hardware or software, or sign service contracts;

(2) Complete their data loading; and

(3) Begin electronic transmission by May 20, 1994. These project owners are required to transmit data collected for the 12 months preceding May 20, 1994, as well as data collected on or after this date.

(c) Project owners of applicable projects under § 208.104(b) must electronically transmit data for certification, recertification and subsidy billing procedures in a HUD specified format to the contract administrator. State housing finance and development agencies and Public Housing Agencies that serve as the subsidy contract administrator must accept the electronic transmission of the HUD forms listed below in § 208.108(e) from the projects they administer, and electronically transmit that data to HUD in a HUD specified format. These project owners are required to transmit data collected for the 12 months preceding the effective date of the rule, as well as data collected on or after the effective date of the rule.

(d) Project owners of applicable projects under § 208.104(c) must electronically transmit data for certification, recertification and subsidy billing procedures to HUD in a HUD specified format. In the case of partially assisted section 202 projects, owners are required to electronically transmit data only for subsidized units. These project owners are required to transmit data collected for the 12 months preceding the effective date of the rule, as well as data collected on or after the effective date of the rule.

(e) Electronic transmission consists of data transmitted from the HUD–50059, 50059 worksheets, 52670 and 52670A, Parts 1 and 2 and 52671 A through D correctly formatted in accord with the HUD data requirements and in lieu of the hard copy forms.

§ 208.112 Cost.

(a) The costs of the electronic transmission of the correctly formatted data, including either the purchase and maintenance of computer hardware or software, or both, the cost of contracting for those services, or the cost of centralizing the electronic transmission function, shall be considered project operating costs to be paid from project income, and considered project operating costs for the purpose of processing and approving requests for HUD approval of rent increases.

(b) At the owner's option, the cost of the computer software may include service contracts to provide maintenance or training, or both. Regardless of whether an owner obtains service contracts to provide maintenance or training or both, the software must be updated to incorporate changes or revisions in legislation, regulations, handbooks, notices or HUD electronic transmission data format requirements.

(c) The source of funds for the purchase of hardware or software, or contracting for services for electronic transmission, may include current project operating income; an expense item in processing rent increases; a loan from the Reserve for Replacement Account, or a release from the Residual Receipts Account.

(d) A loan from the Reserve for Replacements Account must be repaid within a five year period from the release date.

(e) Owners of smaller projects or partially assisted projects with few subsidized units that determine that the purchase of hardware and/or software is not cost effective may contract out the electronic data transmission function to organizations that provide such services, including, but not limited to the following organizations: local management agents, local management associations and management agents with centralized facilities. Owners of multiple projects may centralize the electronic transmission function. However, owners that contract out or centralize the electronic transmission function are required to retain the ability to monitor the day-to-day operations of the project at the project

site and be able to demonstrate that ability to the relevant HUD field office.

Dated: November 12, 1993.

Nicolas Retsinas,

Assistant Secretary for Housing—Federal Housing Commissioner.

[FR Doc. 93–28388 Filed 11–18–93; 8:45 am]

BILLING CODE 4210–27–M

Office of the Secretary

24 CFR Parts 770, 882, 889, 890, 941

Determination of Areas of Undue Concentration of Poverty-Level Population; and Conforming Amendments

CFR Correction

In Title 24 of the Code of Federal Regulations, parts 700 to 1699, revised as of April 1, 1993, the following corrections should be made:

1. On pages 36 through 39 part 770 is removed.

2. On page 259, in § 882.404, paragraph (b)(3) was incorrectly printed and should read as follows:

§ 882.404 Housing quality standards.

* * * * *

(b) * * *

(3) Promote greater choice of housing opportunities and avoid undue concentration of assisted persons in areas containing a high proportion of low-income persons.

* * * * *

3. On page 285, in § 882.708, paragraph (d) was incorrectly printed and should read as follows:

§ 882.708 New construction: Site and neighborhood standards.

* * * * *

(d) The site must promote greater choice of housing opportunities and avoid undue concentration of assisted persons in areas containing a high proportion of lower income persons.

* * * * *

4. On page 547, in § 889.230, paragraph (f) is removed.

5. On page 574, in § 890.230, paragraph (h) is removed.

6. On page 917, in § 941.202, paragraph (d) was incorrectly printed and should read as follows:

§ 941.202 Site and neighborhood standards.

* * * * *

(d) The site must promote greater choice of housing opportunities and avoid undue concentration of assisted persons in areas containing a high proportion of low-income persons.

* * * * *

BILLING CODE 1505–01–D

DEPARTMENT OF DEFENSE

Office of the Secretary

32 CFR Part 154

Department of Defense Personnel Security Program Regulation

AGENCY: Office of the Secretary, DoD.

ACTION: Final rule.

SUMMARY: This document updates policy and procedural changes concerning Department of Defense Personnel Security Program Regulation (DoD 5200.2–R). These changes implement recommendations of a recent General Accounting Office study entitled "Security Clearances: Due Process for Denials and Revocations by Defense, Energy, and State," dated May 6, 1992. Significant changes pertain to written notification and prompt resolution of suspension actions, assistance in obtaining investigative files, entering clearance determinations into the Defense Clearance and Investigations Index (DCII), retention of adjudicative rationales, entering "access" codes into the DCII, and a new report control symbol for management data.

EFFECTIVE DATE: July 14, 1993.

FOR FURTHER INFORMATION CONTACT: Mr. Peter R. Nelson, telephone 703–697–3969 or DSN 227–3969.

SUPPLEMENTARY INFORMATION: It has been certified that the regulatory action is not subject to Executive Order 12866, "Regulatory Planning and Review", because the regulatory action does not: (1) Have an annual effect on the economy of $100 million or more or adversely in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety or State, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

It has been certified that the rule is not subject to Public Law 96–354, "Regulatory Flexibility Act", because the rule promulgates policy and procedural changes to DoD 5200.2–R. These changes implement recommendation of a recent General Accounting Office study entitled "Security Clearances: Due Process for Denials and Revocations by Defense, Energy, and State," dated May 6, 1992. Significant changes pertain to written notification and prompt resolution of suspension actions, assistance in obtaining investigative files, entering clearance determinations into the Defense Clearance and Investigations Index (DCII), retention of adjudicative rationales, entering "access" codes into the DCII, and a new report control symbol for management data.

It has been certified that the rule is not subject to Public Law 96–511, "Paperwork Reduction Act", because the rule does not impose any reporting or record keeping requirements under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501–3520).

List of Subjects in 32 CFR Part 154

Classified information, Government employees, Investigations, Security measures.

Accordingly, 32 CFR part 154 is amended to read as follows:

PART 154—[AMENDED]

1. The authority citation for part 154 is revised to read as follows:

Authority: E.O. 10450, 18 FR 2489, 3 CFR, 1949–1953 Comp., p. 936; E.O. 12356, 47 FR 14874 and 15557, 3 CFR, 1982 Comp., p. 166; E.O. 10865, 25 FR 1583, 3 CFR, 1959–1963 Comp., p. 398; E.O. 12333, 46 FR 59941, 3 CFR, 1981 Comp., p. 200.

2. Section 154.2 is amended by revising footnote 1 to read as follows:

§ 154.2 Applicability.

* * * * *

[1] Copies may be obtained, at cost, from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

* * * * *

2a. Section 154.3 is amended as follows:

a. Paragraph (o) is removed and paragraphs "(p) through (ee)" are redesignated as "(o) through (dd)".

b. Paragraph (e) and newly redesignated paragraph (q) are revised.

c. Paragraph (f) is amended by revising "organization" to read "Chairman".

d. Paragraph (h) is amended by revising "Chairman," to read "Chairman of".

§ 154.3 Definitions.

* * * * *

(e) *Defense Clearance and Investigative Index (DCII).* The DCII is the single, automated, central DoD repository which identifies investigations conducted by DoD investigative agencies, and personnel security determinations made by DoD adjudicative authorities.

* * * * *

(q) *Periodic Reinvestigation (PR).* An investigation conducted every five years for the purpose of updating a previously completed background investigation, special background investigation, single scope background investigation or PR on persons occupying positions referred to in § 154.19. Investigative requirements are as prescribed in appendix A to part 154, section 5. The period of investigation will not normally exceed the most recent 5-year period.

3. Section 154.43 is revised to read as follows:

§ 154.43 Adjudicative record.

(a) Each adjudicative determinations, whether favorable or unfavorable, shall be entered into the Defense Clearance and Investigations Index (DCII) on a daily basis, but in no case to exceed 5 working days from the date of determination.

(b) The rationale underlying each unfavorable personnel security determination, to include the appeal process, and each favorable personnel security determination where the investigation or information upon which the determination was made included significant derogatory information of the type set forth in § 154.7 and appendix H to part 154, shall be maintained in written or automated form and is subject to the provisions of 32 CFR part 285 and 32 CFR part 310. This information shall be maintained for a minimum of 5 years from the date of determination.

4. Section 154.48 is amended as follows:

a. Paragraph (a) by revising "DSCI" to read "DCII".

b. Paragraph (b) by revising "12" to read "24" and after the word "months" add "and/or".

c. Paragraph (d) by revising "OJCS" to read "Chairman of the Joint Chiefs of Staff".

5. Section 154.49 is amended by revising paragraph (c) to read as follows:

§ 154.49 Granting access.

* * * * *

(c) The access level of cleared individuals will, wherever possible, be entered into the Defense Clearance and Investigations Index (DCII), along with clearance eligibility. However, completion of the DCII Access field is required effective October 1, 1993 in all instances where the adjudicator with a personnel security investigation. Agencies are encouraged to start completing this field as soon as possible.

6. Section 154.55 is amended by revising paragraph (c) and in paragraph (d) by revising "in no way" to read "not".

§ 154.55 Requirements.

* * * * *

(c) *Suspension.*

(1) The commander or head of the organization shall determine whether, on the basis of all facts available upon receipt of the initial derogatory information, it is in the interests of national security to continue subject's security status unchanged or to take interim action to suspend subject's access to classified information or assignment to sensitive duties (or other duties requiring a trustworthiness determination), if information exists which raises serious questions as to the individual's ability to intent to protect classified information or execute sensitive duties (or other duties requiring a trustworthiness determination) until a final determination is made by the appropriate authority designated in appendix F to this part.

(2) Whenever a determination is made to suspend a security clearance for access to classified information or assignment to sensitive duties (or other duties requiring a trustworthiness determination), the individual concerned must be notified of the determination in writing by the commander, or head of the component or adjudicative authority, to include a brief statement of the reason(s) for the suspension action consistent with the interests of national security.

(3) Component field elements must promptly report all suspension actions to the appropriate central adjudicative authority, but not later than 10 working days from the date of the suspension action. The adjudicative authority will immediately update the DCII Eligibility and Access fields to alert all users to the individual's changed status.

(4) Every effect shall be made to resolve suspension cases as expeditiously as circumstances permit. Suspension cases exceeding 180 days shall be closely monitored and managed by the DoD Component concerned until finally resolved. Suspension cases pending in excess of 12 months will be reported to the DASD(CI&SCM) for review and appropriate action.

(5) A final security clearance eligibility determination shall be made for all suspension actions and the determination entered in the DCII. If, however, the individual under suspension leaves the jurisdiction of the Department of Defense and no longer requires a clearance (or trustworthiness determination), entry of the "Z" Code (adjudication action incomplete due to loss of jurisdiction) if the clearance eligibility field is appropriate. In no case shall a "suspension" code (Code Y) remain as a permanent record in the DCII.

(6) A clearance or access entry in the DCII shall not be suspended or downgraded based solely on the fact that a periodic reinvestigation was not conducted precisely within the 5 year time period for TOP SECRET/SCI or within the period prevailing for SECRET clearances under departmental policy. While every effort should be made to ensure that PRs are conducted within the prescribed time frame, agencies must be flexible in their administration of this aspect of the personnel security program so as not to undermine the ability of the Department of Defense to accomplish its mission.

7. Section 154.56(b)(1) is amended after the word "permit." by adding a new sentence to read as follows:

§ 154.56 Procedures.

* * * * *

(b) * * *

(1) * * * The statement will also provide the name and address of the agencies (agencies) to which the individual may write to obtain a copy of the investigative file(s) upon which the unfavorable administrative action is being taken. * * *

* * * * * *

8. Section 156.60 is amended by revising paragraph (d)(2) as follows:

* * * * *

§ 154.60 Evaluating continued security eligibility.

* * * * *

(d) * * *

(2) Moreover, individuals having access to classified information must report promptly to their security office:

(i) Any form of contact, intentional or otherwise, with individuals of any nationality, whether within or outside the scope of the employee's official activities, in which:

(A) Illegal or unauthorized access is sought to classified or otherwise sensitive information.

(B) The employee is concerned that he or she may be the target of exploitation by a foreign entity.

(ii) Any information of the type referred to in § 154.7 or appendix H to this part.

* * * * *

9. Section 154.61 is amended as follows:

a. Paragraphs (b) (2) and (d) are revised.

b. Paragraph (e) (2) is amended by revising the word "assure" to read "ensure" and "Defense Central Index of Investigations" to read "Defense Clearance and Investigations Index".

§ 154.61 Security education.

* * * * *

(b) * * *

(2) If an individual declines to execute Standard Form 312, "Classified Information Nondisclosure Agreement" (replaced the Standard Form 189), the DoD Component shall initiate action to deny or revoke the security clearance of such person in accordance with § 154.56(b).

* * * * *

(d) Foreign travel briefing. While world events during the past several years have diminished the threat to our national security from traditional cold-war era foreign intelligence services, foreign intelligence service continue to pursue the unauthorized acquisition of classified or otherwise sensitive U.S. Government information, through the recruitment of U.S. Government employees with access to such information. Through security briefings and education, the Department of Defense continues to provide for the protection of information and technology considered vital to the national security interests from illegal or unauthorized acquisition by foreign intelligence services.

(1) DoD Components will establish appropriate internal procedures requiring all personnel possessing a DoD security clearance to report to their security office all contacts with individuals of any nationality, whether within or outside the scope of the employee's official activities, in which:

(i) Illegal or unauthorized access is sought to classified or otherwise sensitive information.

(ii) The employee is concerned that he or she may be the target of exploitation by a foreign entity.

(2) The DoD security manager, security specialist or other qualified individual will review and evaluate the reported information. Any facts or circumstances of a reported contact with a foreign national that appear to:

(i) Indicate an attempt or intention to obtain unauthorized access to proprietary, sensitive, or classified information or technology;

(ii) Offer a reasonable potential for such; or

(iii) Indicate the possibility of continued contact with the foreign national for such purposes, shall be promptly reported to the appropriate counterintelligence agency.

10. Section 154.76 is amended in paragraphs (a) and (c) by revising "Deputy Under Secretary of Defense for Policy" to read "Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C31))".

11. Section 154.77 is revised to read as follows:

§ 154.77 Reporting requirements.

(a) The OASD(C31) shall be provided personnel security program management data by the Defense Data Manpower Center (DMDC) by December 31 each year for the preceding fiscal year. To facilitate accurate preparation of this report, all adjudicative determinations must be entered into the DC11 by all DoD central adjudication facilities no later than the end of the fiscal year. The information required below is essential for basic personnel security program management and in responding to requests from the Secretary of Defense and Congress. The report shall cover the preceding fiscal year, broken out by clearance category, according to military (officer or enlisted), civilian or contractor status and by the central adjudication facility that took the action, using the enclosed format:

(1) Number of Top Secret, Secret, and Confidential clearances issued;

(2) Number of Top Secret, Secret, and Confidential clearances denied;

(3) Number of Top Secret, Secret, and Confidential clearances revoked;

(4) Number of SCI access determinations issued;

(5) Number of SCI access determinations denied;

(6) Number of SCI access determinations revoked; and

(7) Total number of personnel holding a clearance for Top Secret, Secret, Confidential and Sensitive Compartmented Information as of the end of the fiscal year.

(b) The Defense Investigative Service (DIS) shall provide the OASD(C3I) a quarterly report that reflects investigative cases opened and closed during the most recent quarter, by case category type, and by major requester. The information provided by DIS is essential for evaluating statistical data regarding investigative workload and the manpower required to perform personnel security investigations. Case category types include National Agency Checks (NACs); Expanded NACs; Single Scope Background Investigations (SSBIs), Periodic Reinvestigations (PRs); Secret Periodic Reinvestigations (SPRs); Post Adjudicative (PA); Special Investigative Inquiries (SIIs); and Limited Inquiries (LIs). This report shall be forwarded to OASD(C3I) within 45 days after the end of each quarter.

(c) The reporting requirement for DMDC and DIS has been assigned Report Control Symbol DD–C3I(A) 1749.

12. Appendix A to part 154 is amended as follows:

a. Section 5.a. is revised.

b. Paragraph "5.b.(8)" is redesignated as "5.b.(10)".

c. New paragraphs b.(8) and b.(9) are added.

Appendix A to Part 154—[Amended]

* * * * *

5. * * *

a. Each DoD military, civilian, consultant and contractor employee (to include non-U.S. citizens (foreign nationals and/or immigrant aliens) holding a limited access authorization) occupying a critical sensitive position, possessing a TOP SECRET clearance, or occupying a special access program position shall be the subject of a PR initiated 5 years from the date of completion of the last investigation. The PR shall cover the period of the last 5 years.

b. * * *

(8) *Neighborhood Investigation.* Conduct a neighborhood investigation to verify subjects' current residence in the United States. Two neighbors who can verify subject's period of residence in that area and who are sufficiently acquainted to comment on the subject's suitability for a position of trust will be interviewed. Neighborhood investigations will be expanded beyond the current residence when unfavorable information arises.

(9) *Ex-spouse interview.* If the subject of investigation is divorced, the ex-spouse will be interviewed when the date of final divorce action is within the period of investigation.

13. Appendix D to part 154, section 3 is amended by revising the words "designated country (Appendix G)" to read "foreign country or foreign intelligence service".

14. Appendix G is removed and reserved.

15. Appendix H to part 154, "Foreign Connections/Vulnerability To Blackmail or Coercion," section 3 introductory text is amended by revising "or in a country designated hostile to the United States (See appendix G)" to read "foreign intelligence services."

Dated: November 15, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–28437 Filed 11–18–93; 8:45 am]

BILLING CODE 5000–04–M

Department of the Army

32 CFR Part 505

[Department of the Army Pamphlet 25–51]

Army Privacy Program; Correction

AGENCY: Department of the Army, DOD.

ACTION: Correcting amendment.

SUMMARY: This document contains corrections to the final rule which was published on July 27, 1992 (57 FR 33125). The final rule related to changing the system identifiers in accordance with the Modern Army Recordkeeping System (MARKS).

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Mr. William Walker at (703) 697–1276.

SUPPLEMENTARY INFORMATION: Executive Order 12866. The Director, Administration and Management, Office of the Secretary of Defense has determined that this Privacy Act rule for the Department of Defense does not constitute 'significant regulatory action'. Analysis of the rule indicates that it does not have an annual effect on the economy of $100 million or more; does not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; does not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; does not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866 (1993).

Regulatory Flexibility Act of 1980. The Director, Administration and Management, Office of the Secretary of Defense certifies that this Privacy Act rule for the Department of Defense does not have significant economic impact on a substantial number of small entities because it is concerned only with the administration of Privacy Act systems of records within the Department of Defense.

Paperwork Reduction Act. The Director, Administration and Management, Office of the Secretary of Defense certifies that this Privacy Act rule for the Department of Defense imposes no information requirements beyond the Department of Defense and that the information collected within the Department of Defense is necessary and consistent with 5 U.S.C. 552a, known as the Privacy Act of 1974.

List of Subjects in 32 CFR Part 505

Privacy.

Accordingly, 32 CFR part 505 is corrected by making the following correcting amendments:

1. The authority citation for 32 CFR part 505 continues to read as follows:

Authority: Pub. L. 93–579, 88 Stat 1896 (5 U.S.C. 552a).

2. Section 505.5(e) is amended by revising the following introductory paragraphs: a.; b.; c.; d.; e.; f.; g.; h.; i.; k.; l.; m.; n.; o.; p.; q.; r.; t.; u.; w.; x.; y.; z.; aa.; ab.; ac.; ad.; ae.; af.; ag.; ah.; ai.; aj.; and ak.

§ 505.5 Exemptions.

* * * * *

(e) * * *

a. System identifier: A0020–1aSAIG.

* * * * *

b. System identifier: A0020–1bSAIG.

* * * * *

c. System identifier: A0025–55SAIS.

* * * * *

d. System identifier: A0027–1DAJA.

* * * * *

e. System identifier: A0027–10aDAJA.

* * * * *

f. System identifier: A0027–10bDAJA.

* * * * *

g. System identifier: A0190–5DAMO.

* * * * *

h. System identifier: A0190–9DAMO.

* * * * *

i. System identifier: A0190–14DAMO.

* * * * *

k. System identifier: A0190–30DAMO.

* * * * *

l. System identifier: A0190–40DAMO.

* * * * *

m. System identifier: A0190–45DAMO.

* * * * *

n. System identifier: A0190–47DAMO.

* * * * *

o. System identifier: A0195–2USACIDC.

* * * * *

p. System identifier: A0195–2aUSACIDC.

* * * * *

q. System identifier: A0195b6USACIDC.

* * * * *

r. System identifier: A0210–7DAMO.

* * * * *

t. System identifier: A0340JDMSS.

* * * * *

u. System identifier: A0340–21SAIS.

* * * * *

w. System identifier: A0350–37TRADOC.

* * * * *

x. System identifier: A0351–12DAPE.

* * * * *

y. System identifier: A0351–17aTAPC–USMA.

* * * * *

z. System identifier: A0351–17bTAPC–USMA.

* * * * *

aa. System identifier: A0380–13DAMO.

* * * * *

ab. System identifier: A0380–67DAMI.

* * * * *

ac. System identifier: A0381–45aDAMI.

* * * * *

ad. System identifier: A0381–45bDAMI.

* * * * *

ae. System identifier: A0381–45cDAMI.

* * * * *

af. System identifier: A0381–100aDAMI.

* * * * *

ag. System identifier: A0381–100bDAMI.

* * * * *

ah. System identifier: A0601–141DASG.

* * * * *

ai. System identifier: A0601–210aUSAREC.

* * * * *

aj. System identifier: A0601–222USMEPCOM.

* * * * *

ak. System identifier: A0608–18DASG.

* * * * *

Dated: November 12, 1993.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–28445 Filed 11–18–93; 8:45 am]

BILLING CODE 3810-01-F

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 55

[FRL–4803–3]

Outer Continental Shelf Air Regulations; Denial of Petition for Reconsideration of Corresponding Onshore Area Designation

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule: Petition for reconsideration.

SUMMARY: This action announces that EPA is denying a petition for reconsideration under provisions of the Clean Air Act ("the Act"), administrative procedures and judicial review related to rulemaking. This action concerns the corresponding onshore area ("COA") designation for the Chevron platform named "Grace" (hereafter referred to as platform Grace), which was established in the Outer Continental Shelf ("OCS") regulations promulgated on September 4, 1992. The COA for this platform is currently the Ventura County Air Pollution Control District ("Ventura County APCD"). The Petition for Reconsideration was filed by the Santa Barbara County Air Pollution Control District ("Santa Barbara County APCD") on February 19, 1993. EPA is denying this petition because it does not meet the standard for reconsideration set forth in the Act. The intended effect of this notice is to designate a COA for platform Grace so that the source can comply with the OCS air regulations by the September 4, 1994 compliance date.

EFFECTIVE DATE: November 19, 1993.

ADDRESSES: Material relevant to the COA designation for the OCS platform listed above can be found in EPA docket A–91–76. This docket is available for public inspection and copying at the following locations:

U.S. Environmental Protection Agency, Region 9, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460.

These locations are open to the public Monday through Friday, 9 a.m. to 5 p.m., excluding legal holidays. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Christine Vineyard, Rulemaking Section II (A–5–3), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105 (415–744–1195).

SUPPLEMENTARY INFORMATION: On September 4, 1992, EPA promulgated the Outer Continental Shelf Air Regulations (40 CFR part 55) in the Federal Register (57 FR 40792). The rule was promulgated pursuant to section 328 of the Act, 42 U.S.C. 7627, and established requirements to control air pollution from OCS sources in order to attain and maintain federal and state ambient air quality standards and to comply with the provisions of part C of title I of the Act. The rule applies to all OCS sources located offshore of the United States except for those located in the Gulf of Mexico west of 87.5 degrees longitude.

Section 328 requires that for such sources located within 25 miles of a state's seaward boundary, the requirements must be the same as would be applicable if the sources were located in the COA. The COA is defined in the Act as:

> With respect to any OCS source, the onshore attainment or nonattainment area that is closest to the source, unless the Administrator determines that another area with more stringent requirements with respect to the control and abatement of air pollution may reasonably be expected to be affected by such emissions. Such determination shall be based on the potential for air pollutants from the OCS source to reach the other onshore area and the potential of such air pollutants to affect the efforts of the other onshore area to attain or maintain any Federal or State ambient air quality standard or to comply with the provisions of part C of subchapter I of this chapter.

42 U.S.C. 7627(a)(4)(B). Section 328 (a)(1) requires new sources (as defined in section 111(a) of the Act) to comply with the OCS rule immediately upon promulgation, and existing sources to comply 24 months thereafter, or by September 4, 1994.

The Administrator designated the COAs for all existing and proposed OCS sources offshore of California in the preamble to the final rule. 57 FR 40796–40797. The Administrator codified those designations in an action published on March 16, 1993 (58 FR 14157). Santa Barbara County APCD has filed a petition for reconsideration with EPA, asking EPA to reconsider the COA designation for the OCS platform Grace. Santa Barbara APCD has also filed a petition for review in the United States Court of Appeals for the District of Columbia; this petition does not challenge EPA's COA designation of platform Grace. *Santa Barbara County Air Pollution Control District* v. *U.S. EPA*, No. 92–1569 (D.C. Cir. Nov. 2, 1992).

In the preamble to the proposed OCS rule, EPA proposed that the nearest onshore area ("NOA") be the COA for all existing and proposed OCS sources offshore of California, including platform Grace. 56 FR 63774, 63780 (December 5, 1991). EPA stated that it planned to finalize these designations on the date of promulgation of the OCS rule, so that sources would "have adequate time to determine the applicable requirements, install necessary controls, and receive the required permits, and the proposed sources will be given early notice of the requirements with which they must comply." *Id.*

No comments were submitted concerning EPA's designation of the Ventura County APCD as the COA for platform Grace. Unlike the Ventura County APCD's petition to EPA for reconsideration of eight (8) COA designations in which the District had to comment and submit a stringency analysis (59 FR 14157), the Santa Barbara County APCD needed only to comment that EPA erred in the identification of the NOA for platform Grace.

Because no comments were received that supported a change in the COA designations, EPA finalized these designations in the preamble to the final rule. 57 FR 40797. EPA neglected, however, to codify these designations in 40 CFR part 55. EPA therefore codified the final action taken on these designations in a new § 55.15 in the March 16, 1993 notice. 59 FR 14157.

On February 19, 1993, the Santa Barbara County APCD filed a petition for reconsideration of the COA designation for platform Grace. Although petitioner cites the Administrative Procedure Act, 5 U.S.C. 553(e), as the basis for its right to petition for reconsideration, the final action at issue here was taken concurrently with the OCS rulemaking, which the Administrator determined to be subject to the requirements of section 307(d) of the Clean Air Act. 56 FR 63774. Section 307(d)(7)(B) provides in part:

> If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. * * * Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

Petitioner does not claim that it did not have enough time to comment on the COA designation within the comment period or that there is an issue that arose after the time for public comment. The Santa Barbara County APCD asserts merely that EPA initially erred in promulgating the COA designation for platform Grace. This assertion is apparently based on a claim

that Santa Barbara County is the NOA rather than Ventura County.

EPA finds that this issue clearly could have been raised during the comment period. Thus the Santa Barbara County APCD has failed to raise any issue that could not have been raised during the comment period or that arose after the time for public comment. Therefore, EPA has determined that the Santa Barbara County APCD's Petition for Reconsideration should be denied.

Since EPA has determined that the Santa Barbara County APCD could have raised its objection during the public comment period yet failed to do so, EPA does not reach the issue of whether the Santa Barbara County APCD's objection is of central relevance to EPA's action.

Based on the above determination, EPA is denying the Santa Barbara County APCD's request to convene a proceeding for reconsideration of EPA's COA designation for platform Grace.

List of Subjects in 40 CFR Part 55

Environmental protection, Administrative practice and procedures, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Nitrogen oxides, Outer continental shelf, Ozone, Particulate matter, Permits, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: November 10, 1993.

Carol M. Browner,

Administrator.

[FR Doc. 93–28450 Filed 11–18–93; 8:45 am]

BILLING CODE 6560–50–P

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40 CFR Part 300

[FRL–4804–1]

National Oil and Hazardous Substances Contingency Plan; National Priorities List Update

AGENCY: Environmental Protection Agency.

ACTION: Notice of Deletion of the Plymouth Harbor/Cannons Engineering Corporation Site from the National Priorities List.

SUMMARY: The Environmental Protection Agency (EPA) announces the deletion of the Plymouth Harbor/Cannons Engineering Corporation Site in Plymouth, Massachusetts from the National Priorities List (NPL). The NPL is Appendix B of the National Oil and Hazardous Substances Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. EPA and the Commonwealth of Massachusetts have determined that all appropriate Fund-financed responses under CERCLA have been implemented and that no further cleanup by potentially responsible parties is appropriate. Moreover, EPA and the Commonwealth of Massachusetts have determined that remedial actions conducted at the Plymouth Harbor/Cannons Engineering Corporation Site to date remain protective of public health, welfare, and the environment.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT:

James M. Di Lorenzo, Remedial Project Manager, U.S. Environmental Protection Agency, Waste Management Division, JFK Federal Building (HSN–CAN5), Boston, Massachusetts 02203, (617) 223–5510

or

Harish Panchal, State Project Manager, Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup, One Winter Street (fifth floor), Boston, Massachusetts 02108, (617) 556–1118

SUPPLEMENTARY INFORMATION: The site to be deleted from the NPL is:

Plymouth Harbor/Cannons Engineering Corporation Site

A Notice of Intent to Delete for the Site was published in the **Federal Register** on August 25, 1993 (58 FR 44804). The closing date for comments on the Notice of Intent to Delete was October 6, 1993. EPA received no comments.

EPA identifies sites which appear to present a significant risk to public health, welfare, or the environment and it maintains the NPL as the list of those sites. Sites on the NPL may be the subject of the Hazardous Response Trust Fund (Fund-) financed remedial actions. Any site deleted from the NPL remains eligible for Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action. Section 300.425(e)(3) of the NCP states that Fund-financed actions may be taken at sites deleted from the NPL. Deletion of a site from the NPL does not affect potentially responsible party liability or impede agency efforts to recover costs associated with response efforts.

List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous substances, Hazardous waste, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

For the reasons set out in the preamble 40 CFR part 300 is amended as follows:

PART 300—[AMENDED]

1. The authority citation for part 300 continues to read as follows:

Authority: 42 U.S.C. 9601–9657; 33 U.S.C. 1321(c)(2); E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Appendix B—[Amended]

2. Table 1 of Appendix B to part 300 is amended by removing the Site "Plymouth Harbor/Cannons Engineering Corporation in Plymouth, Massachusetts" and by revising the total number of sites from "1,075" to read "1,074".

Dated: Oct. 19, 1993.

Paul Keough,

Acting Regional Administrator, U.S. EPA Region I.

[FR Doc. 93–28509 Filed 11–18–93; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

42 CFR Part 52c

RIN 0905–AD47

Minority Biomedical Research Support Program

AGENCY: Public Health Service, HHS.

ACTION: Final rule.

SUMMARY: The National Institutes of Health (NIH) is amending regulations governing the Minority Biomedical Research Support Program authorized under section 301(a)(3) of the Public Health Service (PHS) Act (42 U.S.C. 241(a)(3)). The intended effect of these amendments is to simplify the language in the Department's regulations and to minimize the need for future regulatory action.

EFFECTIVE DATE: Effective December 20, 1993.

FOR FURTHER INFORMATION CONTACT: Mr. John J. Migliore, NIH Regulations Officer, National Institutes of Health, Building 31, room 3B11, 9000 Rockville Pike, Bethesda, Maryland 20892, or telephone (301) 496–2832 (not a toll-free number).

SUPPLEMENTARY INFORMATION: Regulations at 42 CFR part 52c govern the administration of grants awarded

pursuant to section 301(a)(3) of the Public Health Service (PHS) Act (42 U.S.C. 241(a)(3)). The purpose of those grants is to increase the numbers of ethnic minority faculty, students, and investigators engaged in biomedical research, and to broaden the opportunities for participation in biomedical research of ethnic minority faculty, students, and investigators, by providing general support for biomedical research at eligible institutions. The NIH is revising the regulations to incorporate required changes in the authority citation and other HHS regulations and policies currently cited, change the title of part 52c to match the name of the program, revise the definition of "ethnic minorities" in § 52c.2 to correspond to the current operational definition used in administering the program, and revise the language in section 52c.4 in accordance with the Department's effort to simplify the language in its regulations and minimize the need for future regulatory action.

The NIH announced its intention to revise part 52c in the notice of proposed rulemaking which was published in the Federal Register on August 20, 1992 (57 FR 37745). The public was given 60 days to comment. One comment was received. That commentor objected to the phrase "* * * but is not limited to * * *" which is used to define "ethnic minorities" in § 52c.2. The commentor stated that the phrase "would seem to open the door for application of grant funds to any ethnic minority group regardless of its representation in biomedical research," and that the definition as stated would allow applicants to target anyone in an ethnic minority group even if this group had sufficient access to biomedical careers. The NIH disagreed with that view and chose not to modify the definition as suggested. The phrase "* * * but is not limited to * * *" has long been part of part 52c and prevents the inadvertent omission of other recognized minority groups. Moreover, the phrase is part of Department of Health and Human Services policy requirements.

Regulatory Impact and Regulatory Flexibility Analyses

Executive Order No. 12291

The Secretary has reviewed this final rule under the requirements of Executive Order No. 12291 (Federal Regulation) and has determined that it is not a major rule as defined in section 1(b) of the Executive Order and, therefore, does not require a regulatory impact analysis.

Regulatory Flexibility Act

The Secretary has reviewed this final rule under the requirements of the Regulatory Flexibility Act of 1980 (5 U.S.C. chapter 6) and has determined that it would not have a significant economic impact on a substantial number of small entities and, therefore, does not require a regulatory flexibility analysis.

Paperwork Reduction Act

This final rule does not contain any information collection requirements which are subject to OMB approval under the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35).

Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance numbered program affected by the proposed regulations is: 93.375.

List of Subjects in 42 CFR Part 52c

Biomedical research, Minority biomedical research support, Grants.

For the reasons specified in the preamble, part 52c subchapter D of chapter 1 of title 42 of the Code of Federal Regulations is amended as set forth below.

Dated: September 7, 1993.

Philip R. Lee,

Assistant Secretary for Health.

Approved: October 14, 1993.

Donna E. Shalala,

Secretary.

PART 52c—MINORITY BIOMEDICAL RESEARCH SUPPORT PROGRAM

1. The heading of part 52c is revised to read as set forth above.

2. The authority citation for part 52c is revised to read as follows:

Authority: 42 U.S.C. 216, 241(a)(3).

3. Section 52c.1 is revised to read as follows:

§ 52c.1 Applicability.

The regulations in this part apply to grants (under the Minority Biomedical Research Support Program) awarded in accordance with section 301(a)(3) of the Public Health Service (PHS) Act (42 U.S.C. 241(a)(3)) to increase the numbers of ethnic minority faculty, students, and investigators engaged in biomedical research, and to broaden the opportunities for participation in biomedical research of ethnic minority faculty, students, and investigators, by providing general support for biomedical research programs at eligible institutions.

4. Section 52c.2 is revised to read as follows:

§ 52c.2 Definitions.

As used in this part:

Act means the Public Health Service Act, as amended (42 U.S.C. 201 *et seq.*).

Ethnic minorities includes but is not limited to such groups as Black Americans, Hispanic Americans, Asian/Pacific Islanders, and American Indians/Native Alaskans (Native Americans).

HHS means the Department of Health and Human Services.

Nonprofit as applied to any institution means an institution which is a corporation or association no part of the net earnings of which inures or may lawfully inure to the benefit of any private shareholder or individual.

Program director means a single individual, designated in the grant application, who is scientifically trained and has research experience and who is responsible for the overall execution of the program supported under this part at the grantee institution.

Secretary means the Secretary of Health and Human Services and any other officer or employee of the Department of Health and Human Services to whom the authority involved has been delegated.

5. Paragraph (b) of § 52c.3 is revised to read as follows:

§ 52c.3 Eligibility.

* * * * *

(b) Located in a State, the District of Columbia, Puerto Rico, the Virgin Islands, the Canal Zone, Guam, American Samoa, or the successor States of the Trust Territory of the Pacific Islands (the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau).

6. Section 52c.4 is revised to read as follows:

§ 52c.4 Application.

An institution interested in applying for a grant under this part must submit an application at the time and in the form and manner that the Secretary may prescribe.

7. Section 52c.5 is amended by revising paragraph (a)(1) to read as follows:

§ 52c.5 Grant awards.

(a) * * *

(1) The benefits that can be expected to accrue to the national effort in biomedical research and in increasing the pool of biomedical researchers;

* * * * *

8. Section 52c.7 is revised to read as follows:

§ 52c.7 Other HHS regulations that apply.

Several other regulations and policies apply to grants under this part. These include, but are not necessarily limited to:

37 CFR Part 401—Rights to inventions made by nonprofit organizations and small business firms under government grants, contracts, and cooperative agreements
42 CFR Part 50, Subpart A—Responsibilities of PHS awardee and applicant institutions for dealing with and reporting possible misconduct in science
42 CFR Part 50, Subpart D—Public Health Service grant appeals procedures
45 CFR Part 16—Procedures of the Departmental Grant Appeals Board
45 CFR Part 46—Protection of human subjects
45 CFR Part 74—Administration of grants
45 CFR Part 75—Informal grant appeals procedures
45 CFR Part 76—Governmentwide debarment and suspension (nonprocurement) and governmentwide requirements for drug-free workplace (grants)
45 CFR Part 80—Nondiscrimination under programs receiving Federal assistance through the Department of Health and Human Services Effectuation of Title VI of the Civil Rights Act of 1964
45 CFR Part 81—Practice and procedure for hearings under Part 80 of this title
45 CFR Part 84—Nondiscrimination on the basis of handicap in programs and activities receiving Federal financial assistance
45 CFR Part 86—Nondiscrimination on the basis of sex in education programs and activities receiving or benefiting from Federal financial assistance
45 CFR Part 91—Nondiscrimination on the basis of age in HHS programs and activities receiving Federal financial assistance
45 CFR Part 92—Uniform administrative requirements for grants and cooperative agreements to State and local governments
45 CFR Part 93—New restrictions on lobbying
51 FR 16958, or successor—NIH Guidelines for Research Involving Recombinant DNA Molecules
"Public Health Service Policy on Humane Care and Use of Laboratory Animals," Office for Protection from Research Risks, NIH (Revised September 1986), or successor

[FR Doc. 93–28491 Filed 11–18–93; 8:45 am]
BILLING CODE 4140–01–M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 675

[Docket No. 920944–2302; I.D. 111293B]

Groundfish Fishery of the Bering Sea and Aleutian Islands Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Allocation of Community Development Quota pollock to approved Community Development Plan applicants for 1994 and 1995.

SUMMARY: NMFS announces the approval by the Secretary of Commerce (Secretary) of recommendations made by the Governor of the State of Alaska (Governor) for Community Development Plans (CDPs) during the calendar years 1994 and 1995 under authority of the Community Development Quota (CDQ) program. This action is necessary to publicize the decision of the Secretary to approve the Governor's recommended CDPs, including the percentage of the CDQ reserve for each subarea allocated under the CDPs, and to announce the availability of findings underlying the Secretary's decision. It is intended to further the goals and objectives of the Magnuson Fishery Conservation and Management Act and the Fishery Management Plan (FMP) for the Groundfish Fishery of the Bering Sea and Aleutian Islands Management Area (BSAI).

DATES: Effective January 1, 1994.

ADDRESSES: Copies of the findings made by the Secretary in approving the Governor's recommendation may be obtained from the Fisheries Management Division, Alaska Region, NMFS, P.O. Box 21668, Juneau, AK 99802 (ATTN: Lori Gravel).

FOR FURTHER INFORMATION CONTACT: David C. Ham, Fishery Management Biologist, Alaska Region, NMFS, 907–586–7229.

SUPPLEMENTARY INFORMATION: The CDQ program was developed by the North Pacific Fishery Management Council (Council) and submitted with Amendment 18 to the BSAI FMP which was approved in part by the Secretary (57 FR 23321, June 3, 1992). Federal regulations implementing the CDQ program became effective on November 18, 1992 (57 FR 54936, November 23, 1992).

Eligible western Alaska communities submitted six CDPs requesting allocations of the available CDQ pollock reserve to the Governor under CDQ procedures. The Governor announced a public hearing date of September 8, 1993, in Anchorage, Alaska, and conducted the public hearing during which all interested persons had an opportunity to be heard. The hearing covered the substance and content of the proposed CDPs in such a manner that the general public, and particularly the affected parties, had a reasonable opportunity to understand the impact of each CDP. The Governor made available for public review all State of Alaska materials pertinent to the hearing at the time the hearing was announced. The public hearing held by the Governor satisfied the requirements of § 675.27(a).

On September 22, 1993, the Governor consulted with the Council. After reviewing the Governor's recommendations and considering public testimony, the Council concurred in the Governor's recommendations for CDPs and the percentages of the CDQ reserve for each CDP for the years 1994 and 1995.

On October 1, 1993, the Secretary received the Governor's recommendations to approve the CDPs. The Secretary reviewed the recommendations and the record to determine whether the community eligibility criteria and the evaluation criteria set forth in § 675.27(d) were met. The Secretary determined that the Governor's recommendations are consistent with the eligibility conditions, the evaluation criteria, and other applicable laws and approves the Governor's recommendations.

As required by § 675.27(c)(1), the Secretary publishes this notice of approval of the Governor's recommendations, including the percentage of the CDQ reserve allocated to each approved CDP, and announces the availability of the Secretary's findings regarding this decision (see **ADDRESSES**).

The CDQ reserve for 1994 and 1995 will be 7.5 percent of the pollock total allowable catch specification for each of the three subareas that constitute the BSAI. The Secretary approves the following percentage of CDQ reserve for each CDP recipient for 1994 and 1995:

CDP recipient	CDQ percentage for 1994 and 1995
Aleutian Pribilof Island Community Development Association	10
Bristol Bay Economic Development Association	20
Central Bering Sea Fishermen's Association	8
Coastal Villages Fishing Cooperative	27
Norton Sound Economic Development Corp	20
Yukon Delta Fisheries Development Association	7

Classification

This action is taken under 50 CFR 675.27.

List of Subjects in 50 CFR Part 675

Fisheries, Recordkeeping and reporting requirements.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: November 15, 1993.

Samuel W. McKeen,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

[FR Doc. 93–28488 Filed 11–18–93; 8:45 am]

BILLING CODE 3510–22–M

Proposed Rules

Federal Register
Vol. 58, No. 222
Friday, November 19, 1993

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 51

[Docket Number FV-92-301]

Blueberries; Grade Standards

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed action would revise the United States Standards for Grades of Blueberries, to bring them into conformity with current cultural, harvesting and marketing practices. The recommended revisions would: add another species of cultivated blueberries; eliminate size as a requirement of the grade; revise the existing tolerances and the application of tolerances from the number of defective berries to percentages of defective berries; specify allowable amounts for defects caused by scars and well healed broken skins; redefine terms to more clearly reflect current cultural and marketing practices; and, provide a format consistent with other recently revised U.S. grade standards. The Agricultural Marketing Service (AMS), in cooperation with industry, has the responsibility to develop and improve standards of quality, condition, quantity, grade, and packaging. These revisions would result in more uniform standards which more closely reflect current industry practices.

DATES: Comments must be postmarked or courier dated on or before January 18, 1994.

ADDRESSES: Interested parties are invited to submit written comments concerning this proposal. Comments must be sent to the Standardization Section, Fresh Products Branch, Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture, P.O. Box 96456, room 2056 South Building, Washington, DC 20090-6456. Comments should make reference to the date and page number of this issue of the **Federal Register** and will be made available for public inspection in the above office during regular business hours.

FOR FURTHER INFORMATION CONTACT: Marlene M. Betts, at above address or call (202) 720-2188.

SUPPLEMENTARY INFORMATION: This rule has been reviewed by the Department in accordance with Departmental Regulation 1512-1 and criteria contained in Executive Order 12291 and has been determined to be a "nonmajor" rule.

This proposed rule has been reviewed under Executive Order 12778, Civil Justice Reform. This action is not intended to have retroactive effect. This proposed rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule. There are no administrative procedures which must be exhausted prior to any judicial challenge to the provisions of this rule.

Pursuant to the requirements set forth in the Regulatory Flexibility Act (5 U.S.C. 601 et. seq.), the Administrator of AMS has determined that this action will not have a significant economic impact on a substantial number of small entities. This proposed rule for the revision of U.S. Standards for Grades of Blueberries will not impose substantial direct economic cost, recordkeeping, or personnel workload changes on small entities, and will not alter the market share or competitive position of these entities relative to large businesses. In addition, under the Agricultural Marketing Act of 1946, the application of these standards is voluntary, so members of the blueberry industry need not have their product certified under these standards, thereby incurring no cost at all.

The United States Standards for Grades of Blueberries were last revised in June 1966. The standards are issued under the Agricultural Marketing Act of 1946 (7 U.S.C. 1621 et seq.). The North American Blueberry Council (NABC), which represents the majority of blueberry growers and packers in the United States and Canada, have requested that the standards be revised in order to bring them into conformity with current cultural, harvesting and marketing practices. The NABC contends that due to changes in harvesting practices, more growers using mechanical harvesters versus hand picking, and new improved varieties, changes are necessary in the current standards. The NABC requests changes in the tolerance section of the standards, changing them from a number of defective specimens to a percentage; changing the species covered by the standard; and, clarification of terminology.

A market survey was drafted by the Fresh Products Branch, and sent to industry personnel, other interested parties, and inspection personnel for comments, on September 8, 1992. There were a total of eighteen comments, thirteen from inspection personnel and five from industry personnel. The comments were reviewed by the Fresh Products Branch and discussed with the NABC. Many of the comments were incorporated into the proposal.

The main purpose of the proposal is set forth in order to bring the standards into conformity with current harvesting and marketing practices. In addition, the standards have been reviewed for need, clarity, and effectiveness as part of a periodic review. Accordingly, we propose to amend the regulations as discussed below.

Presently, the United States Standards for Grades of Blueberries applies to selected and hybrid varieties of the highbush blueberry produced under cultivation, but not to other species of the genus Vaccinium nor to the true huckleberries of the genus Gaylussacia. The NABC recommended that the rabbiteye species, (Vaccinium ashei Reade), be covered by the standards. Since that species is grown in sufficient quantities to warrant inclusion into the standard. Based on NABC's recommendation rabbiteye species is included in this proposal.

Currently, blueberries are required to meet a minimum number of blueberries per two gill cup in order to meet U.S. No. 1 grade. However, since blueberries are generally not sized, and there is usually a difference in the size of berries from variety to variety, it is proposed that no size requirements be associated with the grade. Therefore, blueberries could then meet a U.S. No. 1 grade without meeting any size requirements. The "Size Classification" section would remain in the event an interested party requests a size determination. This would tend to enhance marketing with common terminology.

The unclassified designation in section 51.3477 would be eliminated because it is not a grade and only serves to show that no grade has been applied to the lot. Since this designation is rarely used and may create some confusion in the marketplace, it should be discontinued.

In the "Size Classification" section, the unit of measure in the current standard is a two gill cup. As proposed, the unit of measure would be a cup. Although two gill is equivalent to a cup, a cup is better understood by marketing channels. Also the metric equivalent would be included as a footnote.

It has been suggested by the NABC that the tolerances be changed from the number of berries defective to a percentage of berries defective.

It is also proposed that the tolerances for defects at shipping point and en route or destination be determined based on percentages rather than a specific number of berries defective. The tolerances at shipping point would include a total of eight percent for defects which fail to meet the requirements of the grade, including not more than four percent for defects which cause serious damage (such as, but not limited to mummified berries, insects, unhealed broken skins, crushed split, or leaking berries), including not more than one percent for mold or decay.

The proposed tolerances for en route or at destination are similar to the shipping point tolerances, except for some additional tolerances, due to the perishability of blueberries. Therefore, the proposed en route or destination tolerances are as follows: A total of not more than twelve percent for defects which fail to meet the requirements of the grade, including not more than eight percent permanent defects (defects which are not subject to change during shipment or storage, including but not limited to color and scars), including not more than six percent for defects which cause serious damage, including not more than four percent which may be seriously damaged by permanent defects (for example, serious damage by scarring), including not more than two percent affected by mold or decay.

The NABC feels that attached stems are a problem, in that some varieties of blueberries have stems which adhere more readily to the blueberry. Also, growing conditions may cause the stem to remain attached to the blueberry. Therefore, it is proposed that a separate tolerance of not more than ten percent be included in the standards for blueberries which have any length of stem attached.

The current standard contains the total number of berries permitted in individual samples. However, it is proposed that the tolerances be changed from specific number of defective berries to percentages of defective berries, thereby eliminating the existing table. Therefore, it is proposed that an "Application of Tolerances" section be inserted in the regulations to provide percentage limitations of defective berries in individual samples.

The injury designation in section 51.3485 would be eliminated in order to bring the standard into conformity with current terminology and format. Since this designation may create some confusion in the marketplace, it should be discontinued.

Definitions for "well colored," "overripe," "damage," and "serious damage" would be reworded to better reflect current cultural and marketing conditions. "Broken skins" are currently considered defects when they are identified as "broken skins." However, the NABC feels that this is too restrictive. It is their contention that some varieties of blueberries have stems which adhere more readily to the blueberry, making it more difficult to remove the stems without tearing the adjoining flesh. Therefore, it is proposed that "broken skins" would be considered damage when they are well healed and readily noticeable, except for an allowable area within a ⅛ inch circle centered at the stem scar, and serious damage when not well healed. Currently, "scars" are considered defects when readily noticeable. As proposed, "scars" would be considered damage when affecting more than 20 percent of the surface of the individual berry, and as serious damage when they affect more than 50 percent of the surface of the berry.

Finally, the grade standard format itself would be revised and updated to incorporate all of the above mentioned changes, and provide convenient use to the industry.

List of Subjects in 7 CFR Part 51

Agricultural commodities, Food grades and standards, Fruits, Nuts, Reporting and recordkeeping requirements, Vegetables.

PART 51—[AMENDED]

For reasons set forth in the preamble, it is proposed that 7 CFR part 51 be amended as follows:

1–2. The authority citation for 7 CFR part 51 continues to read as follows:

Authority: 7 U.S.C. 1622, 1624.

Subpart—United States Standards for Grades of Blueberries

3. Section 51.3475 is revised to read as follows:

§ 51.3475 General.

(a) These standards apply only to selected and hybrid varieties of the highbush (Vaccinium australe Small and Vaccinium corymbosum L.) and rabbiteye (Vaccinium ashei Reade) blueberries produced under cultivation, but not to other species of the genus Vaccinium nor to the true huckleberries of the genus Gaylussacia.

(b) Because of the size differences between varieties and the difference in size preference in various markets, there are no size requirements in the grade. Therefore, size will not be determined unless specifically requested by the applicant. If requested, size may be specified as provided in § 51.3477.

4. Section 51.3476 is revised to read as follows:

§ 51.3476 U.S. No. 1.

"U.S. No. 1" consists of blueberries which meet the following requirements:

(a) Basic Requirements:
(1) Similar varietal characteristics;
(2) Clean;
(3) Well colored;
(4) Not overripe;
(5) Not crushed, split, or leaking; and,
(6) Not wet.

(b) Free From:
(1) Attached stems;
(2) Mold;
(3) Decay;
(4) Insects or when there is visible evidence of the presence of insects;
(5) Mummified berries; and,
(6) Clusters.

(c) Free From Damage Caused By:
(1) Shriveling;
(2) Broken skins;
(3) Scars;
(4) Green berries; and,
(5) Other means.

(d) Tolerances as specified in § 51.3478 (a) and (b) and applied pursuant to § 51.3479.

5. Sections 51.3477, 51.3478 and 51.3479 and the undesignated center heading preceding each section are revised to read as follows:

Size Classifications

§ 51.3477 Size classifications.

The following size classifications may be used in specifying size of blueberries:

(a) *Extra large.* Less than 90 berries per cup;[1]

(b) *Large.* 90 to 129 berries per cup;[1]

(c) *Medium.* 130 to 189 berries per cup;[1] and,

[1] Cup equals 237 ml, ½ pint, or 2 gills.

(d) *Small.* 190 to 250 berries per cup.[1]
(e) For tolerances see § 51.3478.

Tolerances

§ 51.3478 Tolerances.

In order to allow for variations incident to proper grading and handling, based on sample inspection, the following tolerances, by count, shall be allowed:

(a) *For defects at shipping point.*[2] Ten percent for blueberries which have attached stems. Additionally, not more than 8 percent of the blueberries may be below the remaining requirements of the grade: *Provided,* That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for blueberries which are affected by mold or decay.

(b) *For defects en route or at destination.* Ten percent for blueberries which have attached stems. Additionally, not more than 12 percent of the blueberries may be below the remaining requirements of the grade: *Provided,* That included in this amount not more than the following percentages shall be allowed for defects listed:

(1) 8 percent for blueberries which fail to meet the requirements for this grade because of permanent defects; or,

(2) 6 percent for blueberries which are seriously damaged, including therein not more than 4 percent for blueberries which are seriously damaged by permanent defects and not more than 2 percent for blueberries which are affected by mold or decay.

(c) *Off-size.* In order to allow for variations incident to proper sizing not more than 10 percent of the samples in any lot or one sample, whichever is the greater number, may fail to meet the range in count specified for one of the size classifications in § 51.3477.

Application of Tolerances

§ 51.3479 Application of tolerances.

Individual samples are subject to the following limitations: *Provided,* That the averages for the entire lot are within the tolerances specified for the grade:

(a) For tolerances of 10 percent or more, individual samples may contain not more than one and one-half times the specified tolerances.

(b) For a tolerance of less than 10 percent, individual samples may contain not more than double the specified tolerance.

[2] Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

6. Sections 51.3482 and 51.3483 are revised to read as follows:

§ 51.3482 Well colored.

Well colored means that more than one-half of the surface of the individual berry is blue, bluish-purple, purple, bluish-red, or bluish-black.

§ 51.3483 Overripe.

Overripe means that the individual berry is dead ripe, the flesh is soft and mushy, and past commercial utility.

§§ 51.3484, 51.3485 [Removed]

§ 51.3486 [Redesignated as § 51.3484]

7. Sections 51.3484 and 51.3485 are removed and § 51.3486 is redesignated § 51.3484 and is revised to read as follows:

§ 51.3484 Damage.

Damage means any specific defect described in this section, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the blueberries. The following specific defects shall be considered as damage:

(a) Wet berries when the individual berry is wet from juice from crushed, leaking, or decayed berries, but not due to condensation;

(b) Clusters when there are three or more joined capstems with at least one berry attached;

(c) Shriveling when the skin is slightly wrinkled;

(d) Broken skins when not well healed or when well healed and readily noticeable, except for an allowable area within a ⅛ (3.2 mm) inch circle centered at the stem scar;

(e) Scars when affecting more than 20 percent of the surface of the individual berry; and,

(f) Green berries when one-half or more of the berry is green.

§ 51.3487 [Redesignated as § 51.3485]

8. Section 51.3487 is redesignated § 51.3485 and is revised to read as follows:

§ 51.3485 Serious damage.

Serious damage means any specific defect described in this section, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the blueberries. The following specific defects shall be considered as serious damage:

(a) Decay;

(b) Moldy berries;

(c) Overripe berries;

(d) Crushed, split, or leaking berries;

(e) Mummified berries when the individual berry is dried up, withered or shrunken;

(f) Insects or when there is any visible evidence of the presence of insects, including but not limited to an insect, insect larva, feeding, webbing or frass;

(g) Broken skins when not well healed; and,

(h) Scars when affecting more than 50 percent of the surface of the individual berry.

Dated: November 8, 1993.

Kenneth C. Clayton,

Deputy Administrator for Marketing Programs.

[FR Doc. 93–28267 Filed 11–18–93; 8:45 am]
BILLING CODE 3410-02-P

FEDERAL RESERVE SYSTEM

12 CFR Part 213

[Regulation M; Docket No. R-0815]

Consumer Leasing

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Advance notice of proposed rulemaking.

SUMMARY: The Board is planning to undertake a review of Regulation M, which carries out the provisions of the Consumer Leasing Act, pursuant to the Board's policy of periodically reviewing its regulations. The Consumer Leasing Act requires lessors to provide uniform cost and other disclosures about consumer lease transactions. The Board plans to review Regulation M to determine whether it can be simplified and clarified to carry out more effectively the purposes of the Consumer Leasing Act without diminishing the consumer protections afforded by the statute. To gather information needed for this review and to ensure the participation of interested parties at the beginning of the process, the Board is soliciting comment generally on revisions to the regulation, while also soliciting comment on several specific issues.

DATES: Comments must be received by January 24, 1994.

ADDRESSES: Comments should refer to Docket No. R-0815, and may be mailed to Mr. William W. Wiles, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, NW., Washington, DC 20551. Comments also may be delivered to Room B-2222 of the Eccles Building between 8:45 am and 5:15 pm

weekdays, or to the guard station in the Eccles Building courtyard on 20th Street, NW (between Constitution Avenue and C Street) any time. Comments may be inspected in Room MP-500 of the Martin Building between 9:00 am and 5:00 pm weekdays, except as provided in 12 CFR section 261.8 of the Board's rules regarding the availability of information.

FOR FURTHER INFORMATION CONTACT: Kyung H. Cho or W. Kurt Schumacher, Staff Attorneys (202/452-2412 or 202/452-3667), Division of Consumer and Community Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551. For the hearing impaired *only*, Telecommunications Device for the Deaf (TDD), Dorothea Thompson (202/452-3544), Board of Govenrors of the Federal Reserve System, 20th and C Streets, NW., Washington, DC 20551.

SUPPLEMENTARY INFORMATION:

Background of the Consumer Leasing Act and Regulation M

The Consumer Leasing Act (CLA), 15 U.S.C. 1667-1667e, was enacted into law in 1976 as an amendment to the Truth in Lending Act (TILA). It was based on findings that there was a trend toward leasing as an alternative to purchasing certain consumer items on credit and that consumers were not receiving adequate leasing cost disclosures. The Board was given rulewriting authority, and its Regulation M (12 CFR part 213) implements the CLA. An official staff commentary which interprets the regulation has also been published (12 CFR part 213, Supp. I).

The CLA generally applies to consumer leases of personal property involving less than $25,000 with a term of more than four months. A long-term automobile lease is the most common type of consumer lease covered by the act. Like the credit provisions of the TILA, the CLA requires lessors to provide uniform cost and other disclosures about consumer lease transactions, including in advertising. Prior to entering into a lease agreement, lessors must give consumers approximately 15 to 20 disclosures that include the amount of initial charges to be paid, an identification of leased property, a payment schedule, the liability for maintenance of leased property, and penalties for the early termination of a lease. The law also regulates balloon payments by limiting liability at the end of a lease term to no more than three times the monthly payment.

The Review of Regulation M

The Board's Regulatory Planning and Review Program calls for the periodic review of a regulation with four goals in mind: to clarify and simplify regulatory language; to determine whether regulatory amendments are needed to address technological and other developments; to reduce undue regulatory burden on the industry; and to delete obsolete provisions. The Board plans to begin a review of Regulation M in accordance with the goals of that program. Regulation M has not been substantially revised or reviewed since its inception. The Board is soliciting comments on the provisions of Regulation M and the CLA, including coverage, exempt transactions, and general format and disclosure requirements. The Board requests that commenters include specific suggestions for improvements to the regulation, as well as the rationale for the suggested changes. In addition, the Board has identified the following specific issues on which comment would be helpful:

Disclosure of early termination charges. The CLA and Regulation M require lessors to disclose the amount or method of determining the amount of a charge if the consumer terminates a lease early. Virtually all leases include such a charge and lessors typically disclose the method to determine the charge rather than an amount.

Recently, a United States Court of Appeals held a lessor liable for violating the "reasonably understandable" standard for disclosure under Regulation M by providing an early termination formula that the court found to be overly complex and beyond the understanding of the average consumer. *Lundquist v. Security Pacific*, 993 F.2d 11 (2d Cir. 1993). Though some lessors would generally admit to the complexity of the disclosure, they would insist that, due to the complexity of modern automobile lease transactions, the formula was written as understandably as it could be.

Some representatives of automobile lessors have requested that the Board amend the regulation to allow them to disclose the name of the method to be used in determining the amount of any penalty or other charge for early lease termination, rather than providing a description of the method by giving the precise formula. On the other hand, consumer interest representatives have argued that the formulas used in determining such charges could be made more understandable to consumers, and that simply allowing the disclosure of the name of the method would not allow consumers to determine the cost of an early termination charge--either before or during the performance of the lease. Specific comment is solicited on this issue, including commenters' views on whether the disclosure of the name of the method along with a representative example of a lease termination charge should be considered (as well as any other disclosure alternative) to help inform consumers of the consequences of terminating a lease early.

Broadcast media advertising of leases. Under the regulation, if any advertised lease transaction states certain terms (such as the amount or number of any lease payment) as many as five additional disclosures are required to be given. Due to time and space constraints in television and radio advertisements, some lease disclosures are being provided in small sometimes scrolling print at the bottom of the television screen, or very quickly at the end of the advertisement, arguably with little consumer benefit. Because the oral disclosure of required lease terms is very difficult, there is little radio advertising of leases.

Several representatives of State attorneys general offices have questioned the way that television advertisements for auto leases display the required Regulation M disclosures. They argue that the text is hard to read and appears on the screen only briefly, arguably failing the CLA clear and conspicuous standard. Some leasing representatives have expressed concern about exposure to liability due to the potential for differing State interpretations of what is clear and conspicuous disclosure. They advocate Board action on this issue, offering as an alternative a requirement that a toll-free number be provided in lieu of some or all of the disclosures now required, so consumers could call and obtain them. Comment is specifically solicited on this issue, though this type of change may be more appropriately within the purview of the Congress. Two bills introduced in Congress (S. 1447 and H.R. 3102) would modify the advertising disclosure requirements under the CLA, as well as under the TILA and the Truth in Savings Act, by allowing a toll-free number to be provided in the advertisement instead of the currently required terms. Both bills, however, would only apply to radio advertisements.

Segregation of leasing disclosures from other information. The CLA, unlike most of the consumer credit provisions of the TILA, does not require the segregation of the required disclosures from other terms. In many

lease agreements, a number of the leasing disclosures and the contract terms are one and the same. There is a question whether the absence of a requirement that the consumer leasing disclosures be segregated from general contract or other terms limits the effectiveness of these disclosures in meeting the consumer protection goal of the CLA—to assure meaningful disclosure of lease terms for comparison shopping. The Board solicits comments on whether a segregation requirement should be proposed for adoption in the regulation.

The Board will review the issues and information offered by commenters responding to this notice, and conduct its own research on legal, economic, operational and other issues and data as they relate to Regulation M. Based on the results of its review of Regulation M, including consideration of the comments received on this notice, the Board will decide whether to pursue proposed revisions to the regulation during 1994. The Board contemplates that any proposal to amend the Regulation would be published in the spring of 1994.

By order of the Board of Governors of the Federal Reserve System, November 15, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-28466 Filed 11-18-93; 8:45 am]

BILLING CODE 6210-01-F

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–NM–121–AD]

Airworthiness Directives; Airbus Industrie Model A310 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all Airbus Industrie Model A310 series airplanes. This proposal would require inspections to detect loose self-locking nuts and damaged cotter pins on the actuating cylinder to drag strut attachment of the left- and right-hand main landing gear (MLG), and correction of discrepancies. This proposal is prompted by reports of loose nuts and sheared cotter pins found on in-service airplanes. The actions specified by the proposed AD are intended to prevent an undampened free fall of the left- and right-hand MLG, which subsequently could lead to the inability to retract the MLG and damage to other airplane systems.

DATES: Comments must be received by January 24, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–121–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Messier Services, 45635 Willow Pond Plaza, Sterling, Virginia 20164. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Stephen Slotte, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 93–NM–121–AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–121–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on all Airbus Industrie Model A310 series airplanes. The DGAC advises it has received reports of loose nuts and sheared cotter pins found on these in-service airplanes. These nuts attach the drag strut to the actuating cylinder of the left- and right-hand main landing gear (MLG). Investigation revealed that, during operation of the MLG, loads induced by chafing of the actuating cylinder lugs on the anti-warping washer can cause the rotation of the grease duct, nut, and bolt. Such rotation could shear the cotter pin, which could loosen the nut. Loss of the nut could cause the actuator cylinder to disconnect from the drag strut attachment. This condition, if not corrected, could lead to an undampened free fall of the left- and right-hand MLG; this subsequently could lead to the inability to retract the MLG and damage to other airplane systems.

Messier-Bugatti (the manufacturer of the MLG assembly) has issued Messier-Bugatti Airbus A310 Service Bulletin 470–32–744, dated March 31, 1993, that describes procedures for repetitive inspections to detect loose self-locking nuts and damaged cotter pins on the actuating cylinder to drag strut attachment of the left- and right-hand MLG. This service bulletin also contains procedures for replacement of loose nuts with new washers and new nuts, and torque tightening the nuts; replacement of damaged cotter pins with new cotter pins; and submission of inspection reports. The DGAC classified this service bulletin as mandatory and issued French Airworthiness Directive 93–039–143(B), dated March 31, 1993 in order to assure the continued airworthiness of these airplanes in France.

This airplane model is manufactured in France and is type certificated for operation in the United States under the provisions of Section 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral

airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require repetitive inspections to detect loose self-locking nuts and damaged cotter pins on the actuating cylinder to drag strut attachment of the left- and right-hand MLG. This proposed AD would also require replacement of loose nuts with new washers and new nuts, and torque tightening the nuts; replacement of damaged cotter pins with new cotter pins; and submission of inspection reports. The actions would be required to be accomplished in accordance with the service bulletin described previously.

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

The FAA estimates that 21 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 1 work hour per airplane to accomplish the proposed inspection actions, and that the average labor rate is $55 per work hour. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be $1,155, or $55 per airplane, per inspection cycle. This total cost figure assumes that no operator has yet accomplished the proposed requirements of this AD action.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Airbus Industrie: Docket 93–NM–121–AD.

Applicability: All Model A310 series airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent an undampened free fall of the left- and right-hand main landing gear (MLG), which subsequently could lead to the inability to retract the MLG and damage to other airplane systems, accomplish the following:

(a) Within 60 days after the effective date of this AD, perform an inspection to detect loose self-locking nuts and damaged (sheared or marked) cotter pins on the actuating cylinder to drag strut attachment of the left- and right-hand MLG, in accordance with Messier Bugatti Airbus A310 Service Bulletin 470–32–744, dated March 31, 1993. Repeat this inspection thereafter at intervals not to exceed 500 landings.

(1) If any nut is loose, prior to further flight, replace the nut with a new washer and a new nut, and torque tighten the nut, in accordance with the service bulletin. After replacement, continue to repeat the inspection at intervals not to exceed 500 landings.

(2) If any cotter pin is damaged (sheared or marked), prior to further flight, replace the cotter pin with a new cotter pin, part number MS24665–357, in accordance with the service bulletin. After replacement, continue to repeat the inspection at intervals not to exceed 500 landings.

(b) Within 5 days after accomplishing the requirements of this AD, report all inspection results, positive or negative, to Messier-Bugatti and Airbus Industrie in accordance with Messier-Bugatti Airbus A310 Service Bulletin 470–32–744, dated March 31, 1993. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120–0056.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on November 15, 1993.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–28521 Filed 11–18–93; 8:45 am]

BILLING CODE 4910–13–P

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14 CFR Part 39

[Docket No. 93–NM–184–AD]

Airworthiness Directives; Aerospatiale Model ATR72 Series Airplanes, Equipped With Dunlop Main Landing Gear Wheels, Part Number AHA1752 Pre Mod 6

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Aerospatiale Model ATR72 series airplanes. This proposal would require inspection to detect cracking in the brake side half hub in the bearing housing area of certain main landing gear (MLG) wheels, and replacement of the MLG wheel, if necessary. This proposal would also require the eventual replacement of certain MLG wheels with other wheels, as terminating action for the repetitive inspections. This proposal is prompted by in-service experience that indicates the possibility of fatigue cracking occurring in the subject area. The actions specified by the proposed AD

are intended to prevent failure of the brake side half hub due to fatigue cracking, which could lead to separation of the MLG wheel and tire from the axle.

DATES: Comments must be received by January 3, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–184–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Dunlop Limited, Aviation Division, Silverton House, Vincent Square, London SW1P 2PL, United Kingdom. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Gary Lium, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–1112; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 93–NM–184–AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–184–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on Aerospatiale Model ATR72 series airplanes equipped with Dunlop main landing gear (MLG) wheels, part number AHA1752 Pre Mod 6. The DGAC advises that recent service experience reports have indicated that fatigue cracking can occur in the brake side half hub, part number AHA1750 Mod 1, in the bearing housing area of these MLG wheels. Fatigue cracking, if not detected and corrected in a timely manner, could result in failure of the brake side half hub, which could lead to separation of the MLG wheel and tire from the axle.

Dunlop Limited, Aviation Division, has issued Service Bulletin AHA1752–32–1069, dated June 28, 1993, that describes procedures for conducting an eddy current inspection to detect cracking in the bearing housing of the brake side half hub of Dunlop MLG wheels, part number AHA1752 Pre Mod 6. This service bulletin also contains procedures for replacing the entire MLG wheel if cracked half hub assemblies are detected. If the wheel is replaced with a serviceable like assembly, the eddy current inspections are to be repeated at every tire change. However, if the wheel is replaced with either of two improved assemblies (the hubs of which are not prone to fatigue cracking), the eddy current inspections may be discontinued. The DGAC classified this service bulletin as mandatory and issued French Airworthiness Directive 93–116(B)R1, dated August 18, 1993, in order to assure the continued airworthiness of these airplanes in France.

This airplane model is manufactured in France and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require repetitive eddy current inspections to detect cracking in the bearing housing of the brake side half hub of Dunlop MLG wheels, part number AHA1752 Pre Mod 6. This AD would require that, if any cracked half hub assemblies are detected, the complete wheel must be replaced. If certain improved replacement wheels are installed, the repetitive eddy current inspections may be discontinued. This proposed AD would also require the eventual replacement of all MLG wheels having part number AHA1752 Pre Mod 6, with other (improved) wheels, as terminating action for the repetitive inspections. The actions would be required to be accomplished in accordance with the service bulletin described previously.

The FAA estimates that 16 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 2 work hours per airplane to accomplish the proposed inspection actions, and that the average labor rate is $55 per work hour. Based on these figures, the total cost impact of the proposed inspection actions on U.S. operators is estimated to be $1,760, or $110 per airplane, per inspection. Should a cracked half hub assembly be found, replacement wheel assemblies would be provided by Dunlop at no charge to the operator.

The required wheel replacement action proposed by this action would require approximately 2 work hours to accomplish, at an average labor charge of $55 per work hour. Replacement parts would be provided by Dunlop at no charge to the operators, as part of Dunlop's repair/replacement program. Based on these figures, the total cost impact of the proposed replacement actions on U.S. operators is estimated to be $1,760, or $110 per airplane.

The number of required work hours, as indicated above, is presented as if the accomplishment of the inspections proposed in this AD were to be conducted as "stand alone" actions. However, in actual practice, these actions would be accomplished coincidentally or in combination with normally scheduled tire changes or other maintenance program tasks. Therefore, the actual number of necessary "additional" work hours would be minimal in most instances. Additionally, any costs associated with

special airplane scheduling would be expected to be minimal.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Aerospatiale: Docket 93–NM–184–AD.

Applicability: Model ATR72 airplanes; equipped with Dunlop main landing gear (MLG) wheels, part number AHA1752 Pre Mod 6; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the brake side half hub due to fatigue cracking, which could lead to separation of the MLG wheel and tire from the axle, accomplish the following:

(a) At the next tire change after the effective date of this AD, or within 60 days after the effective date of this AD, whichever occurs later, conduct an eddy current inspection to detect cracking in the bearing housing of the brake side half hub of Dunlop Main Landing Gear (MLG) wheels, part number AHA1752 Pre Mod 6, in accordance with the Accomplishment Instructions of Dunlop Limited, Aviation Division, Service Bulletin AHA1752–32–1069, dated June 28, 1993.

(b) If no cracking is detected, repeat the inspection specified in paragraph (a) of this AD thereafter at every tire change until the requirements of paragraph (d) of this AD are accomplished.

(c) If any cracking is detected, prior to further flight, accomplish one of the following:

(1) Replace the complete MLG wheel with a serviceable MLG wheel having part number AHA1752 Pre Mod 6. Thereafter, repeat the inspections specified in paragraph (a) of this AD at every tire change. Or

(2) Replace the complete MLG wheel with a MLG wheel having part number AHA1752 Post Mod 6. Such replacement constitutes terminating action for the inspection requirements of this AD. Or

(3) Replace the complete MLG wheel with a MLG wheel having part number AHA1890. Such replacement constitutes terminating action for the inspection requirements of this AD.

(d) Within 6 months after the effective date of this AD, replace all Dunlop MLG wheels having part number AHA1752 Pre Mod 6, with MLG wheels having either part number AHA1752 Post Mod 6 or part number AHA1890. Such replacement constitutes terminating action for the requirements of this AD.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(f) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on November 15, 1993.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–28520 Filed 11–18–93; 8:45 am]

BILLING CODE 4910–13–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CT–8–1–6055; A–1–FRL–4803–4]

Approval and Promulgation of Air Quality Implementation Plans; Connecticut; Withdrawal of Proposed Approval of Reasonably Available Control Technology for Non-CTG Processes at Sikorsky Aircraft Division in Bridgeport

AGENCY: Environmental Protection Agency (EPA).

ACTION: Withdrawal of proposed rule.

SUMMARY: EPA is withdrawing a proposed action published on June 24, 1992 (57 FR 28156), to approve a revision to the Connecticut State Implementation Plan (SIP). The Connecticut Department of Environmental (DEP) has formally withdrawn the SIP revision request which would have imposed reasonably available control technology (RACT) on certain processes at the Sikorsky Aircraft Division of the United Technologies Corporation facility in Bridgeport, Connecticut.

FOR FURTHER INFORMATION CONTACT: Steven A. Rapp, (617) 565–9024.

SUPPLEMENTARY INFORMATION: On June 24, 1992, EPA published a notice of proposed rulemaking (57 FR 28156) proposing to approve a request by the Connecticut Department of Environmental Protection (DEP), to revise the Connecticut SIP. The DEP's SIP revision consisted of a plan approval (State Order No. 8015) imposing RACT on volatile organic compound (VOC) emitting operations at Sikorsky Aircraft Division of the United Technologies Corporation facility in Bridgeport that are not otherwise subject to RACT under Connecticut SIP regulations developed pursuant to EPA's Control Technique Guidelines (CTG). The Connecticut SIP includes subsection 22a–174–20(ee) which requires RACT on all stationary sources with potential VOC emissions of 100 tons per year (TPY) or more from non-CTG processes. At the time the DEP originally submitted its RACT plan for Sikorsky Bridgeport, that facility had existing non-CTG processes with potential VOC emissions of more than 100 TPY.

On November 15, 1990, the Clean Air Act Amendments of 1990 (CAAA) were enacted. Section 182(a)(2)((A) of the CAAA required that all states which were required to make corrections to RACT regulations, to revise their VOC

regulations to make them consistent with EPA guidance by May 15, 1991. Connecticut began its efforts to revise its VOC regulations well before enactment, and on October 18, 1991, EPA published a final rule approving Connecticut's revised VOC regulations as part of the SIP. The revised Connecticut VOC regulations include changes which affect the proposed Sikorsky Bridgeport RACT determination. Specifically, Connecticut's revised requirements in subsections 22a–174–20(l), "Metal cleaning" and 22a–174–20(s), "Miscellaneous metal parts and products," now cover the majority of VOC-emitting processes at Sikorsky Bridgeport and therefore supersede portions of State Order No. 8015. Due to these changes, non-CTG operations at this source no longer have potential VOC emissions of 100 TPY or more. Therefore, Sikorsky Bridgeport does not need to have RACT determined for it under Connecticut SIP subsection 22a–174–20(ee). On September 1, 1993, the DEP withdrew its SIP revision. EPA is hereby withdrawing its proposed action published on June 24, 1992 (57 FR 28156) to approve the SIP revision for the Sikorsky Aircraft Division of the United Technologies Corporation facility in Bridgeport, Connecticut.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements.

Note: Incorporation by reference of the State Implementation Plan for the State of Connecticut was approved by the Director of the Federal Register on July 1, 1982.

Dated: November 3, 1993.

Paul G. Keough,

Acting Regional Administrator, Region I.

[FR Doc. 93–28529 Filed 11–18–93; 8:45 am]

BILLING CODE [illegible]

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40 CFR Part 55

[FRL–4803–2]

Outer Continental Shelf Air Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of proposed rulemaking.

SUMMARY: This action announces EPA's proposed decision on the reconsideration proceeding convened on March 16, 1993 for the purpose of determining whether the corresponding onshore area ("COA") designations for outer continental shelf ("OCS") platforms Habitat, Henry, Hillhouse, Houchin, Hogan, and Union A, B, and C (collectively, the "OCS platforms") should be changed to the Ventura County Air Pollution Control District ("Ventura County APCD"). The COA for these platforms is currently the Santa Barbara County Air Pollution Control District ("Santa Barbara County APCD"). The intended effect of this notice is to propose the designation of a COA for the OCS platforms so that the sources can comply with the OCS air regulations (40 CFR part 55) by the September 4, 1994 compliance date. EPA will follow the notice and comment procedures of the Clean Air Act ("the Act"), and will consider comments before taking final action.

DATES: Comments must be received on or before December 20, 1993.

ADDRESSES: Comments should be submitted to: Christine Vineyard, Rulemaking Section II (A–5–3), Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

Material relevant to the COA designations for the OCS platforms listed above can be found in EPA docket A–91–76. This docket is available for public inspection and copying at the following locations:

U.S. Environmental Protection Agency, Region 9, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

These locations are open to the public Monday through Friday, 9 a.m. to 5 p.m., excluding legal holidays. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Christine Vineyard, Rulemaking Section II (A–5–3), Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744–1195.

SUPPLEMENTARY INFORMATION:

I. Background Information

On September 4, 1992, EPA promulgated the Outer Continental Shelf (OCS) rule (40 CFR Part 55) in the **Federal Register** pursuant to section 328 of the Act (57 FR 40792). The OCS rule established requirements to control air pollution from OCS sources in order to attain and maintain federal and state ambient air quality standards and to comply with the provisions of part C of title I of the Act. The rule applies to all OCS sources located offshore of the United States except for those located in the Gulf of Mexico west of 87.5 degrees longitude.

Section 328 requires that for such sources located within 25 miles of a state's seaward boundary, the requirements must be the same as would be applicable if the sources were located in the COA. The COA is defined in the Act as:

> with respect to any OCS source, the onshore attainment or nonattainment area that is closest to the source, unless the Administrator determines that another area with more stringent requirements with respect to the control and abatement of air pollution may reasonably be expected to be affected by such emissions. Such determination shall be based on the potential for air pollutants from the OCS source to reach the other onshore area and the potential of such air pollutants to affect the efforts of the other onshore area to attain or maintain any Federal or State ambient air quality standard or to comply with the provisions of part C of this chapter.

42 U.S.C. 7627. The Act requires new OCS sources (as defined in section 111(a)) to comply with the OCS rule immediately upon promulgation, and existing sources to comply 24 months thereafter, or by September 4, 1994.

The Administrator designated the COAs for all existing and proposed OCS sources offshore of California in the preamble to the final rule. 57 FR 40796–40797. Union Oil Company of California, Pacific Operators, Inc. d.b.a. Pacific Operators Offshore, Inc., and Texaco Exploration and Production Inc. (collectively, "Unocal") and the Ventura County APCD have filed petitions for reconsideration with EPA, asking EPA to reconsider the COA designations for the OCS platforms Habitat, Henry, Hillhouse, Houchin, Hogan, and Union A, B, and C. The Ventura County APCD and Unocal have also filed petitions for review in the Courts of Appeal for the District of Columbia and the Ninth Circuit, but these cases have been stayed pending EPA's review of their petitions for reconsideration. *Ventura County Air Pollution Control District* v. *U.S. EPA*, No. 92–1572 (D.C. Cir. Nov. 3, 1992); *Ventura County Air Pollution Control District* v. *U.S. EPA*, No. 92–70730 (9th Cir. Nov. 3, 1992); *Union Oil Co.* v. *U.S. EPA*, No. 92–1570 (D.C. Cir. Nov. 2, 1992); *Union Oil Co.* v. *U.S. EPA*, No. 70727 (9th Cir. Nov. 3, 1992). In addition, the Santa Barbara County APCD filed a petition for review of the OCS rule in the Court of Appeals for the District of Columbia, *Santa Barbara County Air Pollution Control District* v. *EPA*, No. 92–1569 (D.C. Cir. Nov. 2, 1992), and intervened in the four Unocal and Ventura County APCD actions.

II. Action To Be Reconsidered

On November 2 and 3, 1992, the Ventura County APCD and Unocal, respectively, filed petitions for reconsideration of the COA designations for the OCS platforms identified above. Although petitioners cited the Administrative Procedure Act, 5 U.S.C. 553(e), as the basis for their right to petition for reconsideration, the final action at issue here was taken concurrently with the OCS rulemaking, which the Administrator determined to be subject to the requirements of section 307(d) of the Clean Air Act. 56 FR 63774.

Section 307(d)(7)(B) provides in pertinent part:

> If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed * * *. Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

42 U.S.C. 7607(d)(7)(B). EPA determined that it was appropriate to convene the proceeding for reconsideration. 58 FR 14157.

III. Evaluation

In this reconsideration proceeding, EPA has examined the material submitted by the Ventura County APCD and the Santa Barbara County APCD regarding EPA's COA designation for the OCS platforms at issue. Pursuant to § 55.5(b), the chief executive officer of an APCD, who believes that the District has more stringent air pollution control requirements than the NOA for a proposed OCS source, may submit a request to EPA for the APCD to be designated as the COA. The Ventura County APCD submitted such a request for the OCS platforms. In order to substantiate its request, the Ventura County APCD, not being the NOA, must make a demonstration that: (1) The Ventura County APCD has more stringent requirements with respect to the control and abatement of air pollution than the Santa Barbara County APCD; (2) the emissions from the OCS platforms are or would be transported to the Ventura County APCD; and (3) the transported emissions would affect the Ventura County APCD's effort to attain or maintain a federal or state ambient air quality standard or to comply with the requirements of part C of title I of the Act, taking into account the effect of air pollution control requirements that would be imposed if the Santa Barbara County APCD were designated as the COA. § 55.5(b)(2). If, and only if, EPA concludes that all three criteria of § 55.5(b)(2) were met, EPA will designate an area other than the NOA as the COA.

A. Stringency Analysis

The parties agreed to a June 15, 1993 deadline for the submittal of a stringency analysis and any other relevant data by the Ventura County APCD and the Santa Barbara County APCD. Rules applicable to OCS sources that were already adopted by both the Ventura and Santa Barbara County APCDs as of September 4, 1992 were to be used for the stringency comparison. EPA encouraged the parties to work together to reach consensus on as many issues as possible. On June 15, 1993, both the Ventura County APCD and the Santa Barbara APCD submitted analyses to EPA.

EPA has evaluated the submittals of the Ventura County and Santa Barbara County APCDs on a rule by rule basis. A copy of this evaluation is contained in the Technical Support Document (TSD dated September 24, 1993). After review of the submitted analyses, EPA has determined that Ventura County did not adequately demonstrate that the Ventura County APCD's requirements are more stringent with respect to the control of air pollutants than those of the Santa Barbara County APCD. (See TSD.) Since the first criterion of § 55.5(b) was not met, EPA has concluded that the Santa Barbara County APCD, the NOA for the OCS platforms at issue, will remain the COA. Given its conclusion regarding the first criterion, EPA has not addressed the adequacy of the Ventura County APCD's demonstration on the second and third criteria under § 55.5(b).

IV. Proposed Decision

For the reason cited above, EPA is hereby proposing not to change the following OCS platform COA designations, which shall remain the COA for the lifetime of each source:

Platform A: Santa Barbara County Air Pollution Control District
Platform B: Santa Barbara County Air Pollution Control District
Platform C: Santa Barbara County Air Pollution Control District
Platform Habitat: Santa Barbara County Air Pollution Control District
Platform Henry: Santa Barbara County Air Pollution Control District
Platform Hillhouse: Santa Barbara County Air Pollution Control District
Platform Hogan: Santa Barbara County Air Pollution Control District
Platform Houchin: Santa Barbara County Air Pollution Control District

List of Subjects in 40 CFR Part 55

Environmental protection, Administrative practice and procedure, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Nitrogen oxides, Outer continental shelf, Ozone, Particulate matter, Permits, Reporting and recordkeeping requirements, Sulfur oxides.

Authority: Section 328 of the Clean Air Act (42 U.S.C. 7401 et seq.) as amended by Public Law 101–549.

Dated: November 10, 1993.

Carol M. Browner,

Administrator.

[FR Doc. 93–28449 Filed 11–18–93; 8:45 am]

BILLING CODE 6560-50-P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 583

[Docket No. 92–64; Notice 3]

RIN 2127–AE53

Motor Vehicle Content Labeling

AGENCY: National Highway Traffic Safety Administration, DOT. (NHTSA), Department of Transportation (DOT).

ACTION: Notice of Proposed Rulemaking (NPRM).

SUMMARY: Section 210 (also known as the American Automobile Labeling Act) of the Motor Vehicle Information and Cost Savings Act requires all new passenger motor vehicles (this category includes passenger cars, certain small buses, and all trucks and multipurpose passenger vehicles with a gross vehicle weight rating of 8,500 pounds or less), beginning on October 1, 1994, to bear labels providing information about the domestic and foreign content of their equipment. More specifically, the labels must show: The percentage (by value) of the equipment in the vehicle that originated in the United States and Canada; the foreign countries which are the major sources of the vehicle's equipment and the percentage by value of the equipment originating in each of these countries; the countries of origin

of the vehicle's engine and transmission; and the location where the vehicle was assembled. Section 210 requires vehicles to labeled with this information to enable consumers to take that information into account in deciding which new vehicle to purchase.

This document proposes rules and procedures for implementing section 210. Under the proposed regulation (which closely tracks section 210's language), information concerning country of origin of each piece of equipment must be provided by suppliers. The vehicle manufacturer must combine all the information provided by suppliers, record the final percentages and other information on the proper place on the label, and affix the label to each new passenger motor vehicle before shipment. Dealers are responsible for maintaining the label on each vehicle.

DATES: *Comment closing date*: Written comments must be received on or before January 18, 1994.

Proposed effective date: The proposed new part would be added to the Code of Federal Regulations on December 20, 1993.

Proposed compliance date: Outside suppliers would be required to provide specified information to allied suppliers by May 1 of each year and to manufacturers by June 1 of each year, beginning in 1994. Allied suppliers would be required to provide specified information to manufacturers by June 1 of each year, beginning in 1994. Manufacturers would be required to comply with the proposed vehicle labeling requirements for vehicles manufactured on or after October 1, 1994.

ADDRESSES: Written comments must refer to the docket and notice number set forth above and be submitted (preferably in 10 copies) to the Docket Section, National Highway Traffic Safety Administration, room 5109, 400 Seventh Street SW, Washington, DC 20590.

Submissions containing information for which confidential treatment is requested should be submitted (three copies) to Chief Counsel, National Highway Traffic Safety Administration, room 5219, 400 Seventh Street SW, Washington, DC 20590, and seven additional copies from which the purportedly confidential information has been deleted should be sent to the Docket Section.

FOR FURTHER INFORMATION CONTACT: Mr. Nelson Gordy, Office of Market Incentives, National Highway Safety Administration, room 5313, 400 Seventh Street SW, Washington, DC 20590 (202–366–4797).

SUPPLEMENTARY INFORMATION:

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I. Background

A. Statutory Requirements

Congress enacted the American Automobile Labeling Act as part of the Department of Transportation and Related Agencies Appropriation Act for Fiscal Year 1993, P.L. 102–388. The Labeling Act amends Title II of the Motor Vehicle Information and Cost Savings Act ("Cost Savings Act"), by adding a new section 210. That section requires that new "passenger motor vehicles" manufactured on or after October 1, 1994, bear labels providing information regarding the domestic and foreign origins of their parts. The purpose of section 210 is to provide information on the U.S./Canadian parts content of passenger automobiles to consumers so that they can take account of that information in deciding which new vehicle to purchase.

The term "passenger motor vehicle," defined in section 2(1) of the Cost Savings Act as a motor vehicle with motive power, designed for carrying 12 persons or less, is amended for purposes of section 210 to include any "multipurpose passenger vehicle" and "light duty truck" that is rated at 8,500 pounds gross vehicle weight rating or less. Thus, the new motor vehicle content labeling requirements apply to passenger cars, light trucks, multipurpose passenger vehicles, and certain small buses. Motorcycles are excluded.

The basic labeling requirement is set forth in section 210(b). That section requires that each manufacturer of a new passenger motor vehicle distributed in commerce for sale in the United States shall annually establish for each model year and cause to be affixed, and each dealer shall cause to be maintained, on each such vehicle manufactured on or after October 1, 1994, in a prominent place, one or more labels indicating the following:

(1) The percentage of the value of the equipment that comprises the vehicle that is considered of U.S./Canadian origin;

(2) The names of the countries (other than the U.S./Canada), if any, that contributed the two highest percentages (at a minimum of 15 percent) to the total value of the equipment that comprises the vehicle and the percentages those countries contributed;

(3) The city, state (where appropriate), and country in which the final assembly of the vehicle occurred;

(4) The country of origin for the engine of the vehicle (*i.e.*, the country that contributed the greatest percentage to the total value of the equipment in that engine); and

(5) The country of origin for the transmission of the vehicle (*i.e.*, the country that contributed the greatest percentage to the total value of the equipment in that transmission).

There are several points to be made concerning these five items. First, under sections 210(b)(1) (A) and (C), items one and two are calculated on a "carline" basis. The term "carline" refers to a group of vehicles which has a degree of commonality in construction, according to section 210(f)(11). Thus, the percentages in items one and two are not calculated for each individual vehicle. Therefore, the figures on the label of every vehicle within a carline would be identical.

Second, under section 210(b)(1), the percentages in items one and two are established once per model year, prior

to the beginning of the model year. There are no changes to the figures in the first two items during a model year. The percentages required to be indicated by this section may be rounded to the nearest five percentage points by the manufacturers.

Third, under section 210(b)(1)(C), item two would only be on the label in the event that one or more countries other than the U.S./Canada are, individually, the source of at least 15 percent of the total value of the parts content of the vehicle carline.

Fourth, items three, four, and five are determined on an individual vehicle basis. Therefore the final assembly point, and countries of origin for engine and transmissions may vary for individual vehicles within a carline.

Finally, for country of origin calculations for engines and transmissions, the U.S. and Canada are considered separately. These are the only calculations in which the U.S. and Canada are not considered one entity.

In order to calculate the information required for the label, the vehicle manufacturer must know certain information about the origin of each item of passenger motor vehicle equipment used to assemble its vehicles. For example, in order to calculate the information for the first item of the label, *i.e.*, the percentage of the value of the motor vehicle equipment installed on passenger motor vehicles within a carline which originated in the U.S./Canada, the manufacturer must know the U.S./Canadian content of each item of motor vehicle equipment. Under section 210(f)(4), passenger motor vehicle equipment is defined to include any system, subassembly, or component (other than minor parts such as attachment hardware) received at the final assembly point for installation on, or attachment to, such vehicle at the time of its initial shipment by the manufacturer to a dealer for sale to an ultimate purchaser.

The statute specifies that suppliers of passenger motor vehicle equipment must provide information about the origin of the equipment they supply. For purposes of determining U.S./Canadian origin for the first item of the label, the statute provides different procedures depending on whether equipment is received from an allied supplier (a supplier wholly owned by the manufacturer) or an outside supplier.

For equipment received from outside suppliers, section 210(f)(5)(A) provides that the equipment is considered U.S./Canadian if it contains at least 70 percent value added in the U.S./Canada. Thus, any equipment that is at least 70 percent U.S./Canadian is valued at 100 percent U.S./Canadian, and any equipment under 70 percent is valued at zero percent. For equipment received from allied suppliers, section 210(f)(5)(B) provides that the actual amount of U.S./Canadian content is used.

The Department of Transportation is required to promulgate regulations to implement the content labeling requirements. Section 210(c) requires the promulgation of regulations which specify the form and content of the required labels, and the manner and location in which the labels must be affixed. Section 210(d) requires promulgation of such regulations as may be necessary to carry out the labeling requirements, including regulations to establish a procedure to verify the required labeling information. That section directs also that such regulations provide the ultimate purchaser of a new passenger motor vehicle with the best and most understandable information possible about the foreign and U.S./Canada origin of the equipment of such vehicles without imposing costly and unnecessary burdens on the manufacturers. Finally, section 210(d) also specifies that the regulations include provisions requiring suppliers to certify whether their equipment is of U.S., U.S./Canadian, or foreign origin.

Section 210 does not specify a specific date for completing the necessary rulemaking. However, section 210(d) does direct that the regulations be promulgated in time to provide adequate compliance lead time before content labeling becomes mandatory on October 1, 1994.

B. November 1992 Request for Comments

On November 18, 1992, NHTSA published in the **Federal Register** (57 FR 54351) a request for comments in order to obtain information with which to guide the rulemaking to implement section 210. As part of that process, a public meeting was held on December 17, 1992, during which the agency heard nine speakers. More than 20 written comments were subsequently received by the agency, including comments from vehicle manufacturers, and manufacturer and dealer groups.

C. Summary of Comments in Response to Request for Comments

Label. Most commenters stated that the agency should allow manufacturers maximum flexibility to determine the dimensions and the site of the label, whether it be included on the Monroney price label or the fuel economy label, or on its own.

Several Japanese manufacturers, as well as the American International Automobile Dealers Association (AIADA), suggested that additional information regarding label content be required, or at least permitted, by the proposed regulation. Honda recommended including a notice stating that the figures on the label do not reflect actual values of domestic content of an individual vehicle's equipment, but instead reflect averaged figures from the vehicle's carline; nor do they reflect the cost of labor used to assemble the vehicle. The Japan Automobile Manufacturers Association, Inc. (JAMA) stated that it believes a statement should be included on the label explaining that the percentage of U.S. assembly labor is not included in the figures on the label. AIADA recommended that the label indicate whether a vehicle is considered domestic or imported under corporate average fuel economy (CAFE) standards. AIADA also suggested that the label include the value of U.S. assembly labor or make clear to the consumer that the U.S./Canadian content does not include assembly labor, but only the value of equipment. Both AIADA and Honda stated that the label should indicate that the figures represent only "selected vehicle equipment," or "parts content."

AIADA and Mitsubishi recommended that NHTSA publish a "Consumers Guide to the American Automobile Labeling Act." In addition, AIADA suggested that dealers be permitted to remove labels to aid visibility in test driving new vehicles, and replace labels if they become mutilated or illegible.

Suppliers. The UAW stated that it believes that section 210 distinguishes between outside and allied suppliers because manufacturers are in a better position to get information about the parts content provided by their allied suppliers, thus avoiding imposition of an undue administrative burden on vehicle manufacturers. The 70 percent threshold that outside suppliers must meet in order to call their equipment "U.S./Canadian" is necessary, according to the UAW, in order to ensure that only equipment that has a significant level of domestic content is counted as 100 percent domestic. Ford stated that it believes the 70 percent threshold that outside suppliers must meet in order to call their equipment "U.S./Canadian" is intended to allow them to utilize simpler and less burdensome tracking procedures.

Both Ford and Chrysler commented that, for parts from outside suppliers that contain less than 70 percent U.S./Canadian content, the country of origin should be considered as the country (other than the U.S./Canada) that

contributed the greatest percentage of value to the piece of equipment. Chrysler also noted that the 70 percent threshold would not seriously affect domestic content calculations of an entire carline, in light of the fact that the average motor vehicle contains approximately 1,500 pieces of equipment.

GM commented that in a case in which a foreign subsidiary provides equipment to a domestic subsidiary of the same manufacturer, the foreign subsidiary should be considered an allied supplier. It stated that if a foreign subsidiary and the assembly plant are both owned by the same parent company, then the subsidiary should be considered an allied supplier. This view is echoed by Ford's comment that suppliers owned, operated, or controlled by a parent company (*i.e.*, a consolidated subsidiary of the parent company or a joint venture in which the parent holds a majority interest) should be considered allied suppliers. Honda commented that the term "wholly-owned" is insufficiently defined in section 210, and requested that the agency clarify it. According to Honda, a carline can have more than one manufacturer, and an "allied supplier" that is wholly owned by any one of the manufacturers should be deemed an allied supplier of all of the manufacturers for that carline.

Volkswagen, on the other hand, commented that in the situation in which a foreign subsidiary supplies a domestic subsidiary that supplies a U.S. assembly plant, if both subsidiaries are not wholly owned by the manufacturer, the foreign subsidiary should be considered as an outside supplier.

In-house parts & equipment. Almost all commenters stated that in-house produced equipment should be treated as coming from allied suppliers. In order to achieve this treatment, the UAW urged a broad interpretation of the term "final assembly point," defined in section 210(f)(14). It stated that including in-house equipment in allied supplier calculations would provide an incentive for manufacturers to do more parts manufacturing in-house rather than contracting such work to other companies (including foreign manufacturers). GM stated that it believes that final assembly refers to the operations by which the body, chassis, and powertrain components, are integrated, thus producing an operational vehicle.

Ford, in agreeing with the allied supplier treatment for in-house equipment, commented that the price for such equipment should be equivalent to the intra-division transfer price.

Engine and Transmission. The UAW stated that calculations to determine the country of origin for engines and transmissions should include the value of labor performed in assembling the engine and transmission. It believes that the phrasing of the third sentence of section 210(f)(12) is in error, and should have referred to the purchase price of direct materials and assembly costs; and not merely to the purchase price of direct materials.

Toyota recommended that the agency adopt the Customs Service's substantial transformation test for engines and transmissions as the basis by which their country of origin is determined.

NAFTA, CFTA, CAFE. Numerous commenters suggested that NHTSA follow, as closely as possible, the existing trade provisions of the United States-Canada Free-Trade Agreement (CFTA), the regulations in the CAFE program, or the not-yet-ratified North American Free-Trade Agreement (NAFTA). GM and Chrysler, in particular, advised the agency to adopt NAFTA's provisions wherever possible. Ford, however, stated that it does not believe that NAFTA's provisions would sufficiently fulfill the requirements of section 210. Toyota recommended that the agency adopt NAFTA's Annex 403.1 as its list of automotive equipment that needs to be traced. Volkswagen, on the other hand, stated that section 210's provisions, by excluding Mexico, are contrary to the principles and objectives of NAFTA. Nissan, however, indicated its belief that if, and when, NAFTA comes into force in the U.S., Mexico would be treated as the equivalent of Canada. The opposite point of view was put forward by the American Automobile Manufacturers Association (AAMA), which advocates using CAFE and NAFTA regulations to the greatest extent possible in promulgating these proposed regulations, but noted that Mexico would not be included on the same basis as Canada absent legislative modification of section 210's language.

GM recognized that CAFE regulations do not appear compatible with section 210's requirements for U.S./Canadian content calculations. Ford stated that a common data base can be instituted for labeling information among the various regulatory and trade agreement requirements, even if section 210's requirements are unique.

Substantial transformation. Toyota recommended using the Customs Service's substantial transformation test whenever possible, *i.e.*, whenever the 70 percent threshold mandated in section 210(f)(5)(A) for determining country of origin of equipment does not apply. The substantial transformation test holds that the country in which a raw material was transformed into a good, or the last country in which a great deal of value was added to a good, or in which a good was transformed into its finished state, is considered the good's country of origin. the substantial transformation test is used to determine the national origin of goods for customs purposes. Toyota and the Association of International Automobile Manufacturers (AIAM) believe that use of the substantial transformation test would minimize the burden of the major foreign equipment source calculation required by section 210(b)(1)(C).

Carline. The UAW, GM, Ford, Chrysler, and the AAMA commented that the term "carline" cannot encompass divisions by country of manufacture. All of these commenters state that NHTSA should follow the fuel economy definition of the term, which does not allow manufacturers to split carlines by country. The UAW noted that Congress specified two items (total U.S./Canadian content, and major foreign content sources) be calculated on a carline basis, and the remaining three on a per vehicle basis. The UAW and Ford also stated that vans, utility vehicles, and pickups are separate carlines. Ford pointed out that car or truck lines may be subdivided into new nameplates, *i.e.*, different model names, which should give manufacturers enough latitude if they want to subdivide carline product by assembly plants located in different countries, especially because even minor nameplate variations can justify splitting production into different carlines.

Nissan, Toyota, Mitsubishi, and the AIAM commented that manufacturers should have at least the option of splitting carlines into domestic and foreign categories. Honda commented that the original intent of section 210, before its final form was adopted, was to require content computations for each individual vehicle. It believes the purpose of the change to a carline basis was only to ease implementation of the Act, and not to alter the basic intent of the proposal, and that, therefore, the agency should permit manufacturers to divide production into "domestic carlines" and "foreign carlines."

Bulk materials. Ford recommended that bulk materials such as fasteners, sealers, paint, and solvents, and raw materials should not come under the auspices of the proposed regulation. Volkswagen and Chrysler supported this proposed exclusion. The UAW, on the other hand, stated that paint, sealer, raw

materials, fasteners, and general purpose hardware should be included in calculations of U.S./Canadian content.

Toyota stated that it believes the value of sheet steel used in the manufacturing process should be included as in-house supplied equipment, and also recommended that the agency adopt the list of automotive equipment in Annex 403.1 of NAFTA as the list of equipment that must be traced.

GM commented that manufacturers should be permitted to omit items of very low per-unit value from calculations of U.S./Canadian content provided such items do not amount to more than five percent of the vehicle's total purchase price.

Multi-stage or altered vehicles. Ford and Chrysler recommended that first and intermediate-stage manufacturers be considered allied suppliers of final-stage manufacturers. Chrysler also recommended that vehicle modifiers be exempt from section 210.

The Recreation Vehicle Industry Association (RVIA) commented that final-stage manufacturers and van converters should be excluded from the proposed regulation pursuant to the Regulatory Flexibility Act (5 U.S.C. § 601, *et seq.*). The National Truck Equipment Association (NTEA) stated that the agency should exempt multi-stage produced and altered vehicles from the proposed regulation, or permit final-stage manufacturers and alterers to "pass through" information provided by vehicle chassis manufacturers. In a similar vein, Honda suggested that multistage vehicles be required to follow the procedures for multi-stage vehicle certification in 49 CFR Part 568. Volkswagen commented that each stage manufacturer should calculate the applicable information, and the final-stage manufacturer or alterer should affix the appropriate label.

Exclusions from the full requirements of section 210. The RVIA commented that carlines of which fewer than 20,000 vehicles per year are produced, and recreation vehicle manufacturers that are small businesses should be exempt from the proposed regulations, or should only be required to comply with simplified compliance, recordkeeping and reporting requirements.

Several foreign manufacturers, including Lamborghini, Volvo, Volkswagen, and Mitsubishi, as well as the AIAM recommended that if a carline's U.S./Canadian value is under a certain threshold (ranging from 35 percent down to 15 percent), the manufacturer be permitted to simply note on the label that the car was foreign, or contained less than a threshold level of U.S./Canadian content. Volkswagen recommended setting the level at 35 percent, stating that at a lower level, not enough carlines would be covered by the cut-off to matter. GM and the AAMA did not object to this idea, and would set the cut-off level at 15 percent.

Cost. Only Chrysler responded to the Request for Comments with a cost estimate. It estimated a one time compliance cost of 2,000 man-hours for start up, and 100 man-hours per year thereafter, in order to comply with the requirements of section 210.

II. Overview of Proposal

In this notice, NHTSA is proposing regulations to implement section 210. The regulations would establish requirements for (1) manufacturers of passenger motor vehicles; (2) suppliers of motor vehicle equipment used in the assembly of passenger motor vehicles; and (3) dealers of passenger motor vehicles. A summary of those requirements is set forth below.

NHTSA followed the language of section 210 as closely as possible in developing the proposed regulations. The agency notes that, given the level of detail set forth in the statute, it has little or no discretion with respect to many aspects of the labeling scheme. However, the agency necessarily considered a number of issues in developing the proposal, including those raised by the commenters. These issues are addressed below in the "Details of Proposal" section of this notice.

Since much of the proposal is dictated by the language of section 210, commenters should carefully read the text of section 210 while preparing their comments. Doing so should minimize instances in which commenters ask the agency to embark on a course of action that is proscribed by the statute. For example, comments to the effect that labor and assembly costs at the final assembly point should be included, or requests that wholly owned suppliers to allied suppliers also be treated as allied suppliers are specifically ruled out by section 210. Therefore, such comments will not prove very helpful to the agency in preparing a final rule. It will be more helpful if commenters identify such things as areas where they believe the agency has not implemented a statutory mandate or areas where the commenter believes the agency has imposed an unnecessary requirement.

A. Manufacturers of Passenger Motor Vehicles

Beginning on October 1, 1994, vehicle manufacturers would be required to affix to all new passenger motor vehicles (this category includes passenger cars, certain small buses, and all trucks and multipurpose passenger vehicles with a gross vehicle weight rating (GVWR) of 8,500 pounds or less) a label which provides the following information:

(1) *U.S./Canadian Parts Content*—the overall percentage, by value, of U.S./Canadian content of the motor vehicle equipment installed on the carline of which the vehicle is a part;

(2) *Major Sources of Foreign Parts Content*—the names of the two countries, if any, other than the U.S./Canada, which contributed the greatest amount (at least 15 percent), by value, of motor vehicle equipment for the carline, and the percentage, by value, of the equipment originating in each such country;

(3) *Final Assembly Point*—the city, state (where appropriate), and country in which the final assembly of the vehicle occurred;

(4) *Country of Origin for the Engine;*

(5) *Country of Origin for the Transmission.*

The label would also be required to include a statement below this information reading as follows:

> **Note:** The PARTS CONTENT of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

The information for items (1) and (2) of the label would be calculated, prior to the beginning of the model year, for each carline. The information for items (3), (4) and (5) would be determined for individual vehicles.

Vehicle manufacturers would be able to calculate the information for the label by using information required to be provided to them by suppliers (discussed below). Under the proposed requirements, the vehicle manufacturers would be required to maintain records of the information used to determine the information provided on the labels.

The proposed regulation also would permit manufacturers of carlines with below 35 percent U.S./Canadian content to state the percentage as "minimal," in place of a specific number.

B. Suppliers of Motor Vehicle Equipment

For any equipment that an outside supplier (a supplier not wholly owned by the vehicle manufacturer) supplies to a vehicle manufacturer or to a supplier wholly owned by the vehicle manufacturer (an allied supplier), the outside supplier would be required to provide that manufacturer or allied supplier with the following information:

(1) the price of the equipment to the manufacturer or allied supplier;

(2) whether the equipment has, or does not have, at least 70 percent of its value added in the U.S. and Canada;

(3) for any equipment for which the U.S./Canadian content is less than 70 percent, the country of origin for the equipment, *i.e.*, the country in which the greatest percentage by value (using purchase price) was added to the equipment.

For any equipment that an allied supplier supplies to a vehicle manufacturer, the supplier would be required to provide the manufacturer with the following information:

(1) the price of the equipment to the manufacturer;

(2) the percentage U.S./Canadian content of the equipment;

(3) the country of origin of the equipment, *i.e.*, the country in which the greatest percentage, by value (using purchase price) was added to the equipment.

A supplier of engines and transmissions would be required to provide the vehicle manufacturer with the country of origin for each engine or transmission it supplies to the manufacturer, *i.e.*, the country in which the greatest percentage, by value (using the total cost of *equipment* to the engine or transmission supplier, while excluding the cost of final assembly labor), was added to the engine or transmission.

Both outside and allied suppliers that directly supply equipment to vehicle manufacturers would be required to provide the specified information directly to the vehicle manufacturers, in the form of a certification. Outside suppliers that directly supply to allied suppliers would be required to provide the specified information and certification directly to the allied suppliers. Suppliers would also be required to maintain records of the information used to compile the information provided to the manufacturers and outside suppliers.

The proposed requirements would apply only to suppliers which supply directly to the vehicle manufacturer or to an allied supplier. No requirements would be imposed on suppliers earlier in the chain, *e.g.*, a company which supplies an item of equipment to an outside supplier which then supplies it to a vehicle manufacturer.

C. Dealers of Passenger Motor Vehicles

Dealers would be required to maintain the label on each vehicle until the vehicle is sold to a consumer.

III. Details of Proposal

A. Information on the Label

1. Item One: Percentage U.S./Canadian Content

The first item required on the label is the percentage (by value) of passenger motor vehicle equipment installed on such vehicle within a carline which originated in the U.S. and Canada. This information is identified as "U.S./Canadian" parts content. In order to calculate this figure, the vehicle manufacturer must know:

(1) the U.S./Canadian content (by value) of each item of motor vehicle equipment used to assemble the vehicles within the carline; and

(2) the total value of each such item of equipment, *i.e.*, the price it will pay for each such item of equipment; and

(3) the unit volume of each such item of equipment for each carline.

In calculating the U.S./Canadian parts content for each carline, the manufacturer must reasonably project the installation rates for all equipment offered on that carline. For example, if a carline with a standard manual transmission is offered with an optional automatic transmission, the manufacturer must project the sales of each transmission in advance of the model year. This would also apply to all other equipment options or choices for the vehicle.

To provide an extremely simplified example (with the assumption that all of the equipment in this example is sourced from allied suppliers that are not subject to the roll-up roll-down provision of the statute, as discussed below), assume a manufacturer offers a carline with a manual transmission (with a per-item value of $400 and with 80 percent U.S./Canadian parts content) and an automatic transmission (with a per-item value of $600 and with 40 percent U.S./Canadian parts content). The "other parts" of each vehicle are valued at $9,000 and 65 percent U.S./Canadian parts content, regardless of engine choice. For the carline in a given model year, the manufacturer expects to sell 250,000 cars in total: 100,000 cars with the manual transmission and 150,000 cars with the automatic transmission. The manufacturer would determine the U.S./Canadian parts content for this carline using the following calculation:
[(100,000×400×0.8) + (150,000×600×0.4) + (250,000×9,000×0.65)] divided by [(100,000×400) + (150,000×600) + (250,000×9,000)], which equals 65 percent U.S./Canadian content for the vehicles in the carline (when rounded to the nearest 5 percent).

Under section 210(f)(4), "passenger motor vehicle equipment" is defined to include any system, subassembly, or component (other than minor parts such as attachment hardware) received at the final vehicle assembly point for installation on, or attachment to, such vehicle at the time of its initial shipment by the manufacturer to a dealer for sale to an ultimate purchaser.

Much of the information that manufacturers use to calculate the first item on the label must come from parts suppliers. These calculations are made once for each model year, prior to the model year. As discussed later in this notice, the agency is proposing to require suppliers to provide information to manufacturers concerning the content of the parts they supply.

Determining the U.S./Canadian content of individual items of equipment. Equipment supplied by outside suppliers is considered U.S./Canadian under section 210(f)(5)(A) if the U.S./Canadian value of a type of equipment is 70 percent or greater. Equipment supplied by outside suppliers that does not reach 70 percent threshold of U.S./Canadian content is considered non-U.S./Canadian. Thus, if equipment from an outside supplier has 75 percent U.S./Canadian content, 100 percent of its value is considered U.S./Canadian. However, if equipment has 50 percent U.S./Canadian content, zero percent of its value is considered U.S./Canadian. This statutory provision is sometimes referred to as the "roll-up, roll-down" provision. (This provision, including comments, is further discussed below.)

For equipment supplied by allied suppliers, actual U.S./Canadian content is determined under section 210(f)(5)(B). However, in the determination of that content, equipment that has been delivered to allied suppliers by outside suppliers and has been incorporated into the allied supplier's motor vehicle equipment, is treated in the manner previously described for equipment delivered to manufacturers by outside suppliers. Thus, if the equipment delivered to an allied supplier by an outside supplier has at least 70 percent U.S./Canadian content, the total value of that equipment is considered 100 percent U.S./Canadian. Conversely, if the equipment has less than 70 percent U.S./Canadian content, the entire value of the equipment is considered non-U.S./Canadian.

NHTSA notes that section 210(f)(5)(B) provides a specific formula for determining the U.S./Canadian content of equipment received by manufacturers from allied suppliers. The formula provides first that the foreign content is

determined by adding up the purchase price of all foreign material purchased from outside suppliers that comprise the individual passenger motor vehicle equipment, and then subtracting such purchase price from the total purchase of such equipment. The remainder is the U.S./Canadian content of the equipment.

This formula does not appear to take into account the possibility that an allied supplier may be foreign, since it assumes that everything, except for the foreign value passed through from outside suppliers, is U.S./Canadian. Based on a reading of the statute as a whole, NHTSA does not believe Congress intended to convert the entire value added by allied suppliers located outside the U.S./Canada into domestic content. Therefore, the proposed regulation treats the value added by allied suppliers located outside the U.S. Canada as non-U.S./Canadian. NHTSA specifically requests comments on this issue.

Ford suggested that the agency, in its proposed regulation, need not interpret 210(f)(5)(A) as a roll-up, roll-down provision, and stated that outside suppliers should be permitted the option of reporting the actual U.S./Canadian content in the event that the 70 percent threshold is not met. The agency must disagree, given the statutory language. Section 210(b)(1)(A) requires, in essence, that the label must state the percentage (by value) of parts that meet the definition of "originated in the U.S. and Canada." Under section 210(f)(5)(A), an outside supplied part meets the definition of "originated in the U.S. and Canada" if the part contains 70 percent or more value added in the U.S. and Canada. An outside supplied part does not meet the definition if it contains less than 70 percent value added in the U.S. and Canada. If a part does not meet the definition, then it follows that no part of its value may be reflected in the required percentage (by value) of parts that do satisfy the definition.

The agency also notes that, to allow actual content to be reported from outside suppliers would eliminate the difference in treatment accorded outside and allied suppliers. In interpreting the statute, the agency must assume that Congress, in writing section 210, meant to treat allied suppliers differently than outside suppliers.

Calculating overall U.S./Canadian content. As noted before, in order to determine overall U.S./Canadian content for a carline, the manufacturer must (1) add up the total purchase price it will pay for all items of equipment, (2) add up the U.S./Canadian content (by value) of all items of equipment, and (3) calculate (2) as a percentage of (1).

The total purchase price for all motor vehicle equipment in a carline is based on the total amount that the manufacturer pays to all of its suppliers that deliver such equipment directly to the manufacturer's final assembly point (*i.e.*, the location at which the equipment is assembled into a completed vehicle). Section 210(f)(10)(A), defining the term "value added in the United States and Canada," excludes costs incurred or profits made at the "final assembly point" and beyond (*e.g.*, assembly, labor, advertising, interest payments, etc.). Other post-assembly costs, such as freight, insurance, packing, transportation, duties, taxes, and brokerage fees are similarly excluded. For example, costs associated with shipping completed vehicles from the final assembly point to dealers are excluded from that calculation. Pre-final assembly costs, including such costs as freight to the final assembly plant, are included in calculations of value. The final assembly point is defined in section 210(f)(14) as the plant, factory, or other place at which a new passenger motor vehicle is produced or assembled by a manufacturer and from which a completed vehicle is delivered to a dealer/importer.

It is possible that a manufacturer may conduct some pre-assembly operations, *e.g.*, production of equipment, at the same location as final assembly. In its Request for Comments, NHTSA asked whether equipment produced at the same location as the final assembly plant, *e.g.*, body panels produced in an integrated production plant, be treated as coming from an allied supplier or as part of the final assembly process.

The vast majority of commenters that addressed this question suggested that the pre-final assembly operations performed in-house be treated as operations of an allied supplier. The agency tentatively agrees; final assembly marks a *process* point. This is a significant issue because assembly and labor costs are included in pre-final assembly operations, whether or not performed in-house, but not at the final assembly point. Therefore, to establish consistency among all manufacturers, the agency is proposing to specify a particular phase in the assembly process, for both the body and chassis, that would mark final assembly.

GM stated that final assembly refers to those operations in which the body and chassis (including the power train) are joined or integrated. While the agency generally agrees, there are situations, *e.g.*, unit-body construction, in which such a definition would not apply. For the body of the vehicle, the agency has tentatively selected the moment in the process at which the body leaves the paint shop as the beginning of final assembly. For the chassis, the agency proposes to consider final assembly as beginning the moment prior to attachment of the engine and drive train to the chassis frame or, in the case of unit-body vehicles, on the assembly cradle or jig. All operations such as welding and finishing are completed by then, and the only remaining operations to be performed are assembling the equipment using simple fasteners and adhesives. The agency assumes that in cases in which equipment is not assembled in-house, and is merely shipped to the manufacturer for final assembly, the problem of separating pre-final assembly procedures from final assembly will not arise.

NHTSA specifically requests comments on the proposed definition for when the final assembly begins. The agency notes that labor and other costs associated with assembling the vehicle body and painting it would be counted as parts costs and not excluded as part of the final assembly costs. Depending on the comments, the agency may select a different definition for when final assembly begins for purposes of a final rule.

The agency expects that equipment produced in-house will be priced in accordance with generally accepted accounting principles. In other words, the internal prices between the "allied supplier" and the manufacturer in an in-house situation, must be fair market value prices. If equipment is not priced fairly, consumers would not be receiving the best and most understandable information possible regarding U.S./Canadian content.

The AIAM stated that it was unfair and unprecedented to ignore labor and other assembly costs at the final assembly point, and asked that they be included in the final parts content calculation. NHTSA has no authority to act upon this suggestion positively, because the plain language of section 210 states that costs incurred at or beyond the final assembly point, including labor, advertising, assembly, etc., shall not be included in the final calculations. *See* section 210(f)(10)(A).

However, in order to avoid the possibility that consumers will confuse parts content with overall vehicle content, NHTSA is proposing to require manufacturers to provide an explanatory statement at the bottom of the label. The statement would read:

Note: The PARTS CONTENT of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

The agency contemplates specifying a single numerical range, representative of typical vehicles for the industry as a whole, in the final rule. The same range would be included on the labels of all vehicles. Since the stated range would not vary depending on actual values for particular carlines or vehicles, manufacturers would not need to make any calculations in order to provide the explanatory statement.

NHTSA believes that the proposed statement would clarify the meaning of "parts content" to consumers, and help them understand the significance of the content information provided on the label. The agency believes that this would be consistent with section 210's requirement that the regulations provide to the ultimate purchaser of a new vehicle the best and most understandable information possible about the foreign and U.S./Canada origin of the equipment of such vehicles.

Since the information will vary for different vehicles, NHTSA believes that it is appropriate to state the information in a range, e.g., 60 to 70 percent, 70 to 80 percent, etc. Since the agency does not currently have this information, it is not proposing a specific range. NHTSA requests that manufacturers provide the information for several specific vehicles, as well as their recommendation for a range to include in a final rule. The agency would prefer that the range not be overly large, since it would be less meaningful to consumers. Since the range would be specified for a typical vehicle, the agency expects that a reasonably narrow range could be established.

Several commenters suggested that more information is needed on the label to explain to consumers that items such as labor and assembly costs at the final assembly point are not included in the content information, that allied suppliers are using the 70 percent roll-up, roll-down rule, etc. The agency is trying to define the point at which enough information is given on the label to aid consumers in understanding the meaning of the information that is provided, but without adding such detail and complexity to the label that it becomes incomprehensible to the average consumer. NHTSA believes that requiring the label to contain details other than those outlined above poses just such a risk. The "note" the agency proposes as part of the label should be sufficient to make consumers aware that the label is not based on the total retail, or even total wholesale, value of the vehicle.

Dealer-installed equipment. Toyota commented that manufacturers should be allowed the option of including individual items of equipment installed after a vehicle leaves the final assembly point based on estimates for each carline at the beginning of the model year. GM agreed with that statement, provided dealer-installed options are obtained from the original manufacturer. On the other hand, the AIADA commented that dealers are not prepared to comply with a regulation that demands that they perform calculations to determine the content of dealer and port-installed options.

NHTSA has tentatively concluded that dealer or port-installed optional equipment should be excluded from content calculations. There are several reasons why the agency believes that the calculation of U.S./Canadian parts content is to be fixed at the time of final assembly, and cannot include options added later by either dealers or importers.

First, and most important, the definition of passenger motor vehicle equipment in section 210(f)(4) is limited to equipment delivered to the manufacturer's final assembly point for installation on, or attachment to, a vehicle at the time of its initial shipment by the manufacturer to a dealer. Equipment sent directly to dealers or ports is never sent to the manufacturer's final assembly point at all, and cannot be installed on, or attached to, a vehicle at the time specified in the statute.

Second, section 210(b)(1) states that the *manufacturer* shall affix the label. The agency has determined that the best time for the manufacturer to affix the label is after final assembly, but before shipment from the plant to the dealer or importer (or port).

Thus, equipment sent directly to the dealer or port for installation or attachment after the manufacturer's initial shipment of a completed vehicle does not qualify as equipment under the statute. The label must be affixed before delivery to the dealer or port, and therefore before any dealer installed or port-installed options are added to the vehicle.

Bulk items of equipment, and raw materials. Section 210(f)(4) provides that the term "passenger motor vehicle equipment" does not include minor parts, such as attachment hardware, and lists as examples nuts, bolts, clips, screws, pins, and braces. It goes on to state that such other similar items may also be excluded. Several commenters expressed opinions as to which items should or should not be considered minor parts.

Ford commented that bulk materials such as fasteners, sealers, paint and solvents, and raw materials should not be traced for purposes of identifying the country of origin content. Chrysler recommended that sealers, paints, and solvents be excluded. The UAW disagreed, stating that paint, sealer, raw materials, fasteners, and general purpose hardware should be included in content calculations.

Toyota commented that the value of sheet steel used in the manufacturing process should be included in the in-house supplied equipment. Toyota also suggested that the agency adopt the list of automotive equipment supplied in NAFTA, as Annex 403.1, as the total universe of the items that require tracing and record keeping. GM requested that NHTSA permit manufacturers to omit items of very low per-unit cost entirely in their content calculations provided that the total value of the equipment does not exceed five percent of the total purchase price.

The agency does not agree that the NAFTA Annex 403.1 should be adopted. The NAFTA annex is not inclusive of all parts (for example, horns and air bags are not included). Further, the list might be amended in the future. That would require NHTSA to amend this regulation each time the NAFTA annex was altered.

The agency has tentatively concluded that all parts, including, paint, sealers, and solvents, are to be included as "equipment" for purposes of section 210, what the narrow exception for minor parts provided in section 210(f)(4), *i.e.*, attachment hardware (nuts, bolts, clips, screws, pins, braces). The agency encourages commenters to suggest other, specific minor parts that should be excluded, and to comment on whether paint, sealers, and solvents should be included as "equipment."

Regarding Toyota's comment that the value of sheet steel used in the manufacturing process should be included in the in-house supplied equipment, the agency notes that the value of the steel when purchased by the manufacturer for in-house production, will be one of the factors that makes up the value of the equipment as supplied to the final assembly point, as discussed above. There is no need for separate consideration of sheet steel in the proposed regulation.

Carline. As indicated above, the percentage overall U.S./Canadian content is determined on a "carline" basis instead of for each individual vehicle. Section 210(f)(11) defines

"carline" as meaning a name denoting a group of vehicles which has a degree of commonality in construction (e.g., body, chassis), and not considering any level of decor or opulence and not generally distinguished by such characteristics as roof line, number of doors, seats, or windows, except for light duty trucks. That section also provides that light duty trucks are considered to be different carlines than passenger cars.

Commenters were split as to whether "carline" should encompass different countries of assembly. At present, there are several carlines that are affected by the question of dual nationality: the Buick Century, Chrysler LeBaron, Dodge Spirit, Dodge Shadow, Ford Escort, Geo Metro, Honda Civic, Honda Accord, Nissan Sentra, Plymouth Acclaim, Plymouth Sundance, Subaru Legacy, Toyota Camry, Toyota Corolla, Toyota Pickup, and Suzuki Sidekick.

The UAW commented that the country in which a vehicle is assembled, and the country in which the engine and transmission are built are items of information that pertain to the specific vehicle, but section 210 requires carline calculations for overall U.S./Canadian vehicle content percentages, and the determination of country/ies that contribute at least 15 percent of the vehicle's value.

The UAW also pointed out, as did GM and Ford, that the definition of carline (section 210(f)(11)) is based on the definition of the same term under the CAFE program. The three commenters pointed to Environmental Protection Agency (EPA) regulations 40 CFR 86.082–2, 40 CFR 600.002–85, and 40 CFR 600.511–80, which do not permit manufacturers any option to split carlines by final assembly locations if the vehicles are of the same type. Nissan, Toyota, Mitsubishi, and AIAM all commented that manufacturers should have the option of splitting the reporting of carlines based on the country of origin, or even, as Toyota argued, by assembly points.

NHTSA has tentatively concluded that country of origin or place of assembly should not be considered in making carline determinations. First, section 210(f)(11) specifies that carline determinations are to be made based on degree of commonality in construction. Determining carlines on the basis of country of origin or place of assembly appears inconsistent with this statutory definition since *identical* cars, *i.e.*, ones with total commonality in construction, could be placed in different carlines. Further, such a result might result in consumer confusion. For example, if a consumer ordered a car identical to one for which he or she had taken a test drive, the consumer would find it very odd if the car he or she received had a label indicating that it was in a different carline.

NHTSA recognizes, however, that additional subdivision of carlines by country of manufacture would result in content labeling information that is more representative of the individually labeled vehicles. The agency notes that section 210(d) provides that regulations shall provide to the ultimate purchaser the best and most understandable information possible about the foreign and U.S./Canadian origin of the equipment of such vehicles without imposing costly and unnecessary burdens on the manufacturers.

NHTSA is therefore considering requiring manufacturers that produce a carline manufactured in more than one country to state that fact on the label. This information would be in addition to, and not instead of, the normal labeling requirement proposed in this notice. The information could possibly take the form of stating the U.S./Canadian parts content, and major foreign sources of that portion of the carline produced in a given country. The agency seeks comment on the issue of requiring such information to be added to the parts content label, including whether such a requirement would result in an information "overload" to the consumer, thereby reducing the value of the other information, the advantages of providing the information, and the costs to manufacturers.

NHTSA also requests comments on the possibility of differentiating carlines by engine type. Commenters should specifically address whether separating carlines by engine type would result in a relevant increase in the accuracy of the carline information on the label. In addition, commenters should comment on whether carline differentiation on this basis would add to manufacturers' or suppliers' reporting burden, and to what degree.

NHTSA asked the EPA to comment on the pre-publication draft of the proposed rule, especially regarding any conflicts the proposal might cause with existing EPA regulations. The EPA responded with several suggestions. Its comment noted that the EPA's fuel economy labeling requirements limit applicability to vehicles up to 8,500 pounds GVWR and having a maximum curb weight of 6000 pounds and a maximum frontal area of 45 square feet, and suggested that NHTSA modify its proposed rule to avoid a situation in which a vehicle without a fuel economy label would still need a parts content label. NHTSA cannot change its proposed rule as the EPA suggests because its statutory mandate specifically covers vehicles up to 8,500 pounds GVWR, and does not permit exceptions.

The EPA commented that there are several special cases which constitute exceptions to normal carline classifications. These include separation of sedans and station wagons into separate carlines for fuel economy purposes, and a split of model type (a combination of carline, basic engine, and transmission class) if a manufacturer wishes to highlight an individual model's fuel economy characteristics. It also allows manufacturers to separate convertibles from hard-top models, if the manufacturer choose. NHTSA believes that these distinctions, which may have relevance in a fuel economy context, are unimportant in a content labeling scheme. In addition, the agency believes they are contrary to the statutory language which says that the term carline does not distinguish by characteristics such as roof line, number of doors, seats, or windows. Therefore, the agency is not inclined to adopt these exceptions to normal carline classifications. NHTSA seeks comment from the public on these classifications, and their applicability to the proposed rule.

The EPA noted that it separated light truck carlines by drive system (i.e., 2 wheel drive (2WD) or 4 wheel drive (4WD)), although that was irrelevant for passenger cars. NHTSA is inclined to permit the separation of 2WD and 4WD light trucks into different carlines, and seeks comment on whether light trucks should be separated into different carlines depending on their drive systems.

2. Item Two: Major Foreign Sources of Equipment

Item two on the label, listing the main foreign sources of a carline's equipment, is necessary only if one or more foreign countries (*i.e.*, countries other than the U.S./Canada) each individually contribute at least 15 percent of the value of the carline's equipment. If there is one such country, the manufacturer must list that country and the percentage by value that originated in that country for the carline. If there are two such countries, the manufacturer must list those countries and the percentage by value that originated in those countries for the carline, in descending order of percentage. Manufacturers need not list more than two such countries.

As with the first item on the label, much of the information that manufacturers would need to calculate the information for the second item must come from parts suppliers. As discussed above, in order to calculate the information required for the first item on the label, manufacturers need to know the U.S./Canadian content of each item of equipment and the total value of each such item. Manufacturers which must list at least one country for the second item on the label need to know the actual country of origin of each item of equipment.

The statute does not specify how country of origin is determined for purposes of item two on the label. NHTSA tentatively concludes that the simplest method is to specify one country of origin for each item of equipment, using the country from which the greatest share of value originated for the item of equipment, and is therefore proposing that method. The agency notes that this is the method that Congress prescribed for the only other country of origin calculation in section 210 *i.e.*, country of origin for engines and transmissions in section 210(f)(12). The "greatest share of value added" method of calculation also avoids some of the pitfalls of the substantial transformation test peculiar to the automotive industry, such as the specific levels of value added under the CFTA, and NAFTA before substantial transformation is considered to have occurred. It also avoids the potential problem of future changes to those levels should the trade agreements be amended. A more detailed discussion of the substantial transformation test occurs below.

Like the information calculated for item one of the label, the determination of major countries of origin for equipment installed on passenger vehicles is made for carlines instead of for individual vehicles. In order to calculate the percentage attributable to each foreign country, the manufacturer would (1) determine the total of the purchase prices it will pay for all items of equipment for the carline, (2) determine the total price paid for items of equipment, by country, for equipment with countries or origin other than the U.S. or Canada, and (3) calculate the percentage attributable to each country by dividing the total determined under (2) for that country by the total determined under (1).

3. Items Three, Four, and Five: Place of Final Assembly; Engine/Transmission Countries of Origin

The third item on the label, the final assembly point by city, state (where appropriate) and country, is self-explanatory. It is the location where a vehicle's final assembly takes place, and is determined separately for each vehicle.

The fourth and fifth items on the label, the countries of origin for the engine and transmission, are also determined separately for each vehicle, instead of on a carline basis. The information needed to make these determinations would come from suppliers.

Section 210(f)(12) states that the "country of origin" of an engine or transmission is the country that contributed the greatest percentage of dollar value to the engine or transmission, based upon the purchase price of direct materials received at the individual engine or transmission plant. It also states that the U.S. and Canada are to be treated separately for determining the country of origin. Thus, the country of origin might be the U.S. or Canada, but could not be U.S./Canada.

The term "direct materials" is not defined in section 210 of the Cost Savings Act. The agency has, therefore, referred to similar terms in the CFTA to assist it in defining the term. Section 202(f)(5) of the CFTA defines the term "materials" as meaning goods, other than those included as part of the direct cost of processing or assembling, used or consumed in the production of other goods. Section 202(f)(3) of the CFTA describes "direct cost of processing or direct cost of assembling" as costs that can be allocated to the production of goods, including labor, inspection, energy, fuel, dies, molds, development, rent or mortgage, depreciation of buildings and machinery, and royalty or licensing fees.

NHTSA tentatively concludes that an appropriate definition of the term "direct materials" can be formed based on the CFTA terms "direct costs" and "materials." The agency believes that the term "direct materials" refers to the items (*i.e.*, the materials) that make up the final good (either an engine or a transmission), but that does not include the "costs" (*i.e.*, those items such as labor, that are listed in section 202(f)(3) of the CFTA) that go into assembling the final good. Those "costs" are not "materials." Further, they are not "*received* at the individual engine or transmission plants." (Emphasis added.)

Thus, NHTSA disagrees with the UAW, which commented that the value of labor performed in building or assembling the engine and transmission should be included. The UAW believes that the third sentence of section 210(f)(12) of the Cost Savings Act is in error. However, in the absence of an error that is demonstrable on the face of the statute, the agency must apply the language as it exists.

Therefore, in calculating the country of origin for engines and transmission, the country to which the engine or transmission is attributed is that country in which the greatest percentage by value was added, based on the purchase price of all equipment that makes up the completed engine or transmission. In addition, the country or origin calculation is based on the purchase price an engine or transmission supplier pays for all equipment it receives at the plant at which the engine or transmission is assembled into a completed unit. Based on the language in section 210(f)(12), costs incurred once the engine or transmission supplier has received the equipment at its engine or transmission assembly plants (*e.g.*, labor costs, depreciation of equipment, insurance, etc.) are not permitted to be taken into account for purposes of determining the country of origin of an engine or transmission.

The agency recognizes that some engine/transmission supplies may produce their own equipment that is integrated into the fully-assembled engine/transmission. NHTSA requests comments on whether such "on-site" production should be treated similarly to on-site production at a manufacturer's final assembly point, *i.e.*, by including all costs related to the production of such components, including labor.

Under such an approach, for engine suppliers, production that occurs on-site prior to the point at which the engine parts are assembled to the engine block would not be considered "engine assembly," and non-parts costs would be taken into account in determining the value of the engine in order to determine its country of origin. After that point in the process, assembly and other non-parts costs would be disallowed. For transmission suppliers, production that occurs on-site prior to the point at which the transmission parts are assembled in the transmission casing (or transmission housing) would not be considered "transmission assembly," and non-parts costs would be taken into account in determining the value of the transmission in order to determine its country of origin. Again, after that point in the process, assembly and other non-parts costs would be disallowed. While this approach is not reflected in the proposed regulatory text, the agency may, depending on the comments, adopt such an approach in the final rule.

NHTSA notes that the country of origin determinations for items four and five of the label, on a per vehicle basis, are separate from the information required by all suppliers, including those supplying engines and transmission, for items one and two of the label, U.S./Canadian content and major foreign sources of parts content, on a carline basis. All suppliers, including engine and transmission suppliers, must supply the information required for items one and two of the label in the manner and time described above, and set out in the regulation. The country of origin determinations for engines and transmissions are an additional obligation for those suppliers.

B. Format/Location for Label

The agency is proposing three options for the format of the label: (1) a stand-alone label that is at least 5 inches wide by 3 inches long, (2) an addition at the end of the Monroney pricing label (15 U.S.C. 1232), or (3) an addition at the end of the fuel economy label (15 U.S.C. 2006). Under all three options, the label would be required to read as follows:

For vehicles in this carline:
U.S./Canadian Parts Content: _____%
Major Source of Foreign Parts Content:
[*fill in country/countries*]: _____%
For this vehicle:
Final Assembly Point: _____
Country of Origin:
Engine: _____
Transmission: _____

Note: The PARTS CONTENT of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

The second item of the label (*i.e.*, "Major Source of Foreign Parts Content") would be omitted if no individual country other than the U.S./Canada contributed a minimum of 15 percent of the value of a vehicle's equipment.

If the domestic parts content information were provided on the price or fuel economy labels, the content portion of the label would be required to be clearly separated from the price or fuel economy portion, and the words "Parts Content Information" would be required to appear before the information set forth above.

Sections 210(b)(1) and 210(e) place the responsibility for affixing the content label on the manufacturer. Section 210(e) also implies that the label must be affixed before the vehicle is distributed in commerce, *i.e.*, sold to a dealer for retail sale, or to an importer. With that in mind, the agency is proposing to require that the manufacturer affix the content label to the new vehicle before the vehicle is shipped from the final assembly point to the dealer, shipping agent, or importer.

In response to section 210(d) and the views of the vast majority of commenters, the agency is seeking to minimize the costs of compliance and to provide manufacturers with the maximum permissible flexibility regarding the form and content of the label. However, to ease comparisons among various carlines, and to make the information available to consumers in as clear and consistent a manner as possible, the agency believes it is appropriate to specify minimal requirements for label and letter size. The label, whether separate or attached to the price or fuel economy labels, must be large enough for all the content information to be easily read, yet small enough to avoid cluttering the limited window space on the vehicle.

Accordingly, the agency is proposing that a separate label must be rectangular with a minimum dimension of 5.0 inches (125 mm) in width and 3.0 inches (75 mm) in length. The characters for items one through five of the parts content label would be required to be printed at a minimum height of 12 points (one-sixth of an inch) in boldface type. The required explanatory note at the bottom of the label would be required to be printed in characters two points smaller than the information for items one through five.

If the information required by section 210 is attached to the price or fuel economy labels, the information would be required to be separated from the information required to be on those labels by a line that is a minimum of 3 points wide. The words "PARTS CONTENT INFORMATION" would be required to be printed in bold, uppercase letters, centered, and in not less than 12 point type.

C. Requirements for Suppliers

As discussed above, much of the information that manufactures need to calculate the required items for the label must come from suppliers. Section 210(d) specifies that the agency must issue regulations which include provisions applicable to outside and allied suppliers to require such suppliers to certify whether equipment provided by such suppliers is United States, U.S./Canadian or foreign and to provide such other information as may be necessary to enable the manufacturer to reasonably comply with the provisions of section 210 and to rely on such certification and information.

In order to enable manufactures to calculate the information required for items one and two of the label, *i.e.*, the percentage U.S./Canadian content and major foreign sources of equipment, NHTSA is proposing to require outside suppliers to provide the following information for any equipment they supply to a vehicle manufacturer or to an allied supplier:

(1) the price of the equipment to the manufacturer or allied supplier;

(2) whether the equipment has, or does not have, at least 70 percent of its value added in the U.S. and Canada;

(3) for any equipment for which the U.S./Canadian content is less than 70 percent, the country of origin for the equipment.

The agency is proposing to require allied suppliers to provide the following information for any equipment they supply to a vehicle manufacturer:

(1) the price of the equipment to the manufacturer;

(2) the percentage U.S./Canadian content of the equipment;

(3) the country of origin of the equipment, *i.e.*, the country in which the greatest percentage, by value (using purchase price), of value was added to the equipment.

Both outside and allied suppliers that directly supply vehicle manufacturers would be required to provide the specified information directly to the vehicle manufacturer, accompanied by a certification of the information's accuracy. Outside suppliers that directly supply allied suppliers would be required to provide the specified information and certification directly to the allied supplier. Suppliers would also be required to maintain records of the information used to determine the information provided to the manufacturers or allied suppliers.

GM, Ford, Chrysler, Mitsubishi, and the AIAM suggested that the agency limit the tracking and reporting requirements to "first tier" suppliers, *i.e.*, those who deliver equipment to the manufacturer, itself. They maintained that forcing manufacturers to inquire earlier in the chain of suppliers would prove to be overly burdensome and costly, in contravention of section 210(d), and in some cases impossible.

NHTSA agrees with the general premise that requirements should not apply to suppliers earlier in the supply chain. However, since section 210(d)(17) specifically defines "outside supplier" as including suppliers of motor vehicle equipment to a manufacturer's allied supplier, and since there is the need for information from such suppliers in order to calculate some of the information required for the label, the agency believes that requirements must apply to suppliers

which supply directly to an allied supplier as well as to suppliers which directly supply manufacturers. Under the agency's proposal, however, no requirements would be imposed on suppliers earlier in the chain, *e.g.*, a company which supplies an item of equipment to an outside supplier which then supplies it to a vehicle manufacturer. The agency notes, however, that suppliers which are subject to the proposed information requirements may need in some cases to arrange to obtain information from their suppliers.

Since the information required for items one and two of the label must be calculated before the beginning of the model year and provided on labels attached by the manufacturers, it is important that manufacturers and outside suppliers receive the required information in a timely manner. Model changeover typically occurs during July, and production of new models begins soon after that time so that they can be in showrooms by the beginning of October. NHTSA is therefore proposing to require suppliers to provide the above-mentioned information to manufacturers by June 1 of each year. Since allied suppliers need information from their suppliers in order to provide the required information to manufacturers, the agency is proposing to require outside suppliers which provide equipment to allied suppliers to provide the required information to allied suppliers by May 1 of each year.

Since a typical production period for a model year is from August to July, the agency is proposing to require suppliers to base the information they provide on what they expect to supply during that period. However, since manufacturers may establish different model year production periods for particular carlines, the agency is proposing to permit manufacturers and suppliers to conclude agreements specifying alternative production periods and alternative times for providing the information to the manufacturer.

The agency seeks comment on the suitability of the supplier notification dates suggested above. Do they permit sufficient time to allow manufacturers to prepare the labels required by this regulation in a timely manner? Commenters who disagree with the dates above are invited to suggest alternate dates, with detailed reasoning for their suitability. NHTSA requests that commenters consider the supplier notification dates in conjunction with the alternative contractual option proposed by the agency permitting suppliers and manufacturers to establish their own reporting dates.

As discussed above, the information for items four and five of the label, i.e., countries of origin for the engine and transmission, is calculated for individual vehicles rather than on a carline basis. Suppliers of engines and transmissions would be required to provide the vehicle manufacturer with the country of origin for each engine or transmission it supplies to the manufacturer, *i.e.*, the country in which the greatest percentage, by value (using the total cost of equipment to the engine or transmission supplier), of value was added to the engine or transmission. The agency is proposing to require this information to be provided no later than the time the engine or transmission is delivered to the manufacturer.

D. Requirements for Dealers

Under the agency's proposal, dealers would be required to maintain the label on each vehicle, until the vehicle is sold to a consumer. AIADA commented that dealers should be permitted to remove the label from a vehicle if state law requires it, such as when dealers are operating demonstrator vehicles, or when dealers move cars in an intra-dealer exchange. It also recommended that dealers be permitted to affix duplicate labels in the event that the manufacturer-supplied label becomes torn or otherwise mutilated.

NHTSA has tentatively concluded that dealers should not be permitted to remove the label for any reason before sale to a consumer. The agency believes that it is appropriate to treat this label in same manner as Monroney and fuel economy labels, since all three labels are intended to provide information to aid consumers in making their purchase decision. Neither the EPA or Department of Justice permit dealers to remove fuel economy or Monroney labels, even temporarily, prior to sale to a consumer. The Department of Justice has advised that neither the Monroney nor fuel economy labeling statutes contain exceptions for situations in which labels purportedly constitute safety hazards in demonstrator cars (*i.e.*, those cars that dealers allow potential customers to test drive), and went on to state that it was unaware of any judicial interpretations that would create such exceptions. Section 210 is similar to the other two labeling statutes in that it does not grant NHTSA the authority to permit dealers to remove the label. Indeed, section 210(b)(1) states explicitly that each dealer shall cause the label required by this Act to be maintained on the vehicle.

NHTSA is also concerned that, if dealers were permitted to remove labels for demonstrator vehicles, consumers would not have the labeling information available to them at a crucial time in their purchasing decision, *i.e.*, the time they were evaluating a vehicle for purchase. In addition, the labels might be re-attached inadvertently to the wrong vehicle or not re-attached at all.

The Department of Justice has advised that most manufacturers have been applying Monroney and fuel economy labels to the rear left windows of vehicles, and affixing the vehicles with labels that do not easily tear or loosen from the windows to which they are attached. Such placement does not ordinarily interfere with the driver's vision in the event of a test drive or other similar purpose. Additionally, the dealer could not easily remove the label, even for temporary purposes, without tearing or destroying it.

NHTSA will not, therefore, propose to permit dealers to remove labels for any reason prior to a first sale to a consumer, with one exception: the agency agrees with the AIADA that it is necessary for dealers to replace any label that becomes mutilated or otherwise damaged prior to sale to a consumer so that the information is no longer legible.

E. Manufacturers of Foreign Vehicles

Several manufacturers requested more limited labeling requirements for manufacturers of new passenger motor vehicles that contain minimal U.S./Canadian content. In effect, the label would state that the vehicle contained less than a certain percentage of U.S./Canadian content. It would also state the final assembly point, and the country of origin of the engine and transmission.

Volvo suggested the simplified procedure be implemented for imported vehicles containing under 15 percent U.S./Canadian content. The AAMA agreed with the 15 percent level, stating that Congress appeared to indicate that higher percentages of U.S./Canadian content were significant for purposes of labeling. Volkswagen and the AIAM, however, suggested a level of 35 percent, stating that lower levels would not affect enough vehicles to make implementation of the special provisions worthwhile. Lamborghini, in its testimony at the public meeting in December 1992, suggested a cutoff of 20 percent.

As a practical matter, NHTSA agrees that once the domestic content gets below a certain point, the precise amount of that content becomes immaterial, i.e., the vehicle is foreign and small differences in domestic content are not likely to be relevant to consumer purchasing decisions. Therefore, for vehicles with less than 35

percent U.S./Canadian content, the agency is considering providing manufacturers with the option of simply stating that the percentage U.S./Canadian content is "minimal" instead of determining and providing the precise amount of such content.

The primary benefit of this option would be to eliminate manufacturer costs associated with keeping precise records and making precise calculations about the U.S./Canadian content of a vehicle, when the manufacturer knows such content is very low. Under this option, manufacturers would still be required to provide items 2, 3, 4, and 5 of the label, *i.e.*, major foreign sources of vehicle equipment, place of final assembly and countries of origin of the engine/transmission.

NHTSA notes that such an option would represent a limited exclusion from one of section 210's labeling requirements. As part of considering this option, as well as possible special requirements discussed below for multi-stage and low volume manufacturers, the agency is in the process of evaluating its authority to provide limited exclusions from section 210's labeling requirements. NHTSA will complete its evaluation before reaching a final decision about possible exclusions.

F. Multi-Stage Manufacturers

The RVIA, which represents van converters, customizers, and other manufacturers of recreation vehicles (RVs) in the U.S., suggested in its comments that final-stage manufacturers and van converters be excluded from the need to comply with the proposed regulation pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The NTEA stated that multi-stage produced and altered vehicles should be exempt from the proposed regulation, or that intermediate and final stage manufacturers and alterers be permitted to "pass through" information from chassis manufacturers.

GM commented that the initial stage manufacturer should be required to provide certification of content information to the final stage manufacturer, which would, in turn, be able to use that information in preparing the content label. Alterers would be excluded from the proposed regulation. Ford and Chrysler suggested that first and intermediate-stage manufacturers be considered allied suppliers of the final-stage manufacturer. Volkswagen tended to agree, stating that each manufacturer involved in assembly of a multi-stage or altered vehicle would calculate the applicable content values and the final state manufacturer or alterer would apply the appropriate label.

Alterers are not covered by section 210 for reasons similar to those discussed above concerning dealer and port-installed options. Alterers modify completed vehicles, after they have left the manufacturer's final assembly point, thus after the label is required to be affixed to the completed vehicle. The parts they use are not considered equipment by section 210 of the Cost Savings Act, because they are never shipped to the final assembly point, as required by section 210(f)(4). Their modifications cannot affect carline-basis calculations made before the start of the model year, and cannot be known in advance of the model year by the manufacturer.

The concept of carline, itself, is meaningless for many multi-stage manufacturers. Many of the vehicles made in the multi-stage process are highly specialized, often built to order, A "carline" in this instance could consist of ten, five or even one vehicle. The agency does not believe Congress meant to define carline in such a way. If a "carline" consists of so few vehicles, there is virtually no difference between a "carline" determination (such as required for U.S./Canadian content and major foreign sources) and a "per vehicle" determination (as is required for country of origin of engine and transmission, and final assembly point), and no reason to differentiate between them in the statute.

Therefore, recognizing that multi-stage manufacturers, may not have been considered when the statute was written, and that forcing final-stage manufacturers to consider "carlines" would not help in forwarding the purpose of the statute, the agency is proposing to permit multi-stage manufacturers of "carlines" of fewer than 1000 vehicles to provide a label for vehicles in such a carline that states only the final assembly point, and the country of origin of the engine and transmission, which is per vehicle information under section 210 (items 3, 4, and 5 of the label, as listed above). (A sample label is provided at the end of the regulation.) Such multi-stage manufacturers would not be responsible for listing, and their suppliers would not be responsible for supplying and certifying information regarding, the two carline pieces of information, namely the U.S./Canadian content of the vehicle, and the major foreign sources of parts content (items 1 and 2 of the label). The agency is proposing to make final-stage manufacturers responsible for generating the modified label required under section 210, and for affixing it to the completed vehicle before it is shipped to the dealer, importer, or directly to a consumer.

NHTSA notes that this exception would apply only on a carline basis. If a final stage manufacturer produces three carlines, two of which have production runs of over 1000 vehicles annually, and one which has a production run of under 1000 vehicles, the final stage manufacturer would have to prepare and affix normal labels to vehicles in the two carlines in which over 1000 vehicles are produced annually. The simplified label could only be used on vehicles in the carline in which fewer than 1000 vehicles are produced annually.

The proposed requirements for multi-stage manufacturers would represent a limited exclusion from section 210's labeling requirements. As indicated above, as part of considering these requirements, the agency is evaluating its authority to provide limited exclusions from section 210's labeling requirements.

G. Small Businesses

The RVIA commented that their members are mostly small businesses, that only a minuscule percentage of the items they install (*e.g.*, fasteners, hardware and audio equipment) are of foreign origin, and that the cost of determining the percentage of U.S./Canadian content would be extremely burdensome. Therefore, the RVIA requested an exemption for its members, and for carlines composed of fewer than 20,000 vehicles manufactured per year, or at least a simplified version for compliance with section 210.

NHTSA believes that the same arguments made above in the section discussing multi-stage manufacturers, regarding carlines with a minimal number of vehicles produced annually, can be made in a discussion of small businesses. NHTSA has tentatively decided to permit businesses that produce a total of fewer than 1000 passenger motor vehicles for sale in the United States annually to provide the same simplified label as multi-stage manufacturers, *i.e.*, they would not have to list the carline determinations (items 1 and 2 of the label: U.S./Canadian content, and major foreign sources), but are responsible for a label listing the per vehicle items of the label (items 3, 4, and 5: final assembly point, and country of origin for engines and transmissions).

Thus, compliance is likely to be much less burdensome than the RVIA apparently fears. First, as discussed above, vehicle alterers (*e.g.*, those who customize vans, or otherwise modify completed vehicles) are not required to

comply with section 210. Thus, any options added or customizing changes performed at the "alterer" stage are not covered by this regulation. Second, items such as fasteners, and other minor parts are excluded from tracking, reporting, and recordkeeping requirements under section 210(f)(4). Third, those small businesses, whether or not they are final stage manufacturers in a multi-stage manufacturing process, that produce carlines of a minimal number of vehicles would be responsible for a simplified label, as discussed above.

The proposed requirements for low volume manufacturers would represent a limited exclusion from section 210's labeling requirements. As indicated above, as part of considering these requirements, the agency is evaluating its authority to provide limited exclusions from section 210's labeling requirements.

H. Verification of Labeling Information; Recordkeeping

Section 210(d) provides that the agency must promulgate such regulations as may be necessary to carry out section 210, including regulations to establish a procedure to verify the required labeling information. In order to verify the information provided on labels, NHTSA contemplates that it would conduct, on an occasional basis, an audit of the information provided on a label.

Such an audit would involve requiring the vehicle manufacturer to provide the agency with the manufacturer's basis for the information it provided on the label, *e.g.*, all relevant certifications from suppliers, a listing of parts, cost information, and all calculations used by the manufacturer to derive the information provided on the label. NHTSA would check whether the manufacturer's methodology was consistent with agency regulations. The agency would similarly require individual suppliers to provide the basis for the information and certification that they provided manufacturer or allied supplier.

In order to ensure that the agency can conduct such an audit, as well as otherwise enforce the labeling requirements, it is proposing to require manufacturers to maintain all records which provide a basis for the information they provide on labels, and to similarly require suppliers to maintain records providing the basis for the information and certification they provide to manufacturers or allied suppliers.

Several commenters addressed the length of time such records should be kept. GM noted that EPA requires fuel economy records to be retained for five years (40 CFR 600.005–81). The same retention period is required by the CFTA (19 CFR 10.308). GM suggested that NHTSA should impose the same five year retention period for records in order to be consistent with the other two programs. GM also suggested that suppliers, as well as manufacturers, be required to retain their records for five years. Ford agreed with GM.

The agency notes that EPA requires fuel economy records to be retained for five years after the end of the model year to which they relate. NHTSA tentatively concludes that a retention period of that length is adequate to ensure effective enforcement of the proposed regulation, without imposing an unnecessary storage burden on manufacturers and suppliers. Therefore, the agency is proposing to require manufacturers to maintain records for five years after December 31 of the model year to which the records relate.

Suppliers will not necessarily know the model year to which their records relate. Therefore, the agency is proposing to require suppliers to maintain records, which form a basis for the information they provide to manufacturers or allied suppliers, for six years after December 31 of the calendar year set forth in their submissions to manufacturers/allied suppliers. Since suppliers will generally provide information before the beginning of the model year, i.e., during the spring of the calendar year preceding the model year, this requirement would ensure that the information is maintained for five years after the end of the relevant model year.

At the February 10, 1993 meeting at the Department of Treasury, attended by NHTSA, and other government representatives, as well as representatives of the AAMA, GM, Ford, and Chrysler, the AAMA suggested that manufacturers should have the option of maintaining the records pertaining to the proposed regulation (*i.e.*, U.S./Canadian content of equipment received from suppliers, foreign content, etc.) electronically. NHTSA believes that manufacturers and allied suppliers should retain the original copies of information provided by suppliers, but seeks comment on whether to allow them to retain the certifications and other information obtained from suppliers electronically, specifically in the form of electronic images. The records will have to contain the suppliers' certification of the information that they are providing. The agency is proposing to permit manufacturers and suppliers to maintain all other records in either paper or electronic form for purposes of data storage, provided that in every case all of the information contained in the record is retained.

In addition to ensuring that suppliers and manufacturers maintain relevant records, it is also important, in order for the agency to be able to conduct an audit, to have procedures for obtaining the information from suppliers and manufacturers. NHTSA notes that it already has in place a regulation, 49 CFR Part 510, *Information Gathering Powers*, which governs the use of its information gathering powers contained in, among other places, section 204 of the Cost Savings Act. Section 204 provides the agency with various information gathering powers for the purpose of carrying out the provisions of Title II of the Cost Savings Act, of which section 210 is now a part. Since Part 510 is already in place, the agency does not need to establish new regulations concerning information gathering powers for purposes of section 210.

I. Reporting Requirements

Under the proposed regulation, vehicle manufacturers would be required to submit to the agency three copies of the information that will appear on each carline's label. This information would be required to be submitted for each carline not later than the date the first vehicle of the carline is delivered to dealers for that model year.

The agency believes that this reporting requirement is necessary for several reasons. It would provide one central location from which information can be gathered concerning the labels. Inquiries could come from within the agency, or from interested members of the public. In addition, such reporting would aid the agency in deciding whether to initiate any investigations or audits.

J. Other Issues

1. Currency Exchange Rate Calculations

Since currency exchange rates may fluctuate on a day-to-day basis, thereby affecting domestic content valuations, NHTSA is proposing a methodology for determining the exchange rate to be used. Ford recommended, in response to the agency's request for comment on this issue, that NHTSA adopt the CAFE exchange rate methodology established by the EPA. That methodology uses the average of the previous 12 quarterly exchange rates set by the Federal Reserve Bank of New York. Alternatively, Ford suggested the OECD

Purchasing Power Parity Rates (widely known as "PPP"). Toyota and GM also called for the agency to follow the CAFE methodology, which is found in 40 CFR 600.511–80(b)(1). Nissan commented that each manufacturer should be allowed to establish the appropriate currency rate for its carline.

NHTSA believes that, in the interest of consistency, the percentages printed on the labels required by section 210 should be determined using the same basis. Therefore, the agency is proposing a specific procedure for calculating currency exchange rates, similar to that set forth in EPA's CAFE regulation. Manufacturers would be required to take the mean of the exchange rates in effect at the end of each quarter set by the Federal Reserve Bank of New York for twelve calendar quarters prior to and including the calendar ending one year prior to the date that the manufacturer submits information to the agency for a carline. The agency is proposing essentially the same procedure for suppliers, replacing the date the manufacturer submits information to the agency with the date of the information the supplier provides to a manufacturer or allied supplier.

The EPA, in its comments (see above) suggested that NHTSA allow exchange rate calculations based on PPP, provided that a manufacturer was already using an approved PPP calculation for EPA purposes. EPA allows an exemption form the normal exchange rate calculations outlined above, based on a petition. It believes that, by coordinating the fuel economy and content labeling decisions together, consistency between the two agencies will be maintained. NHTSA is considering adopting the EPA suggestion, particularly by requiring a manufacturer to use the same conversation method for content label purposes as was approved by the EPA for fuel economy purposes. The agency seeks suggestions on this proposal.

2. Corporate Relationship

Joint ventures. Several commenters noted that there are carlines manufactured jointly by two manufacturers, and requested that the agency permit the manufacturers to determine between themselves which would be responsible for tracking, record keeping and labeling. NHTSA tentatively agrees that this is an appropriate approach.

Section 210(f)(15), in defining allied supplier, states that such a supplier is wholly owned by the manufacturer, or by one member of a joint venture arrangement. Thus, if companies A and B jointly manufactured a carline, a supplier wholly owned by either A or B would be considered an allied supplier for the carline jointly manufactured.

The agency is also proposing requirements that would permit multiple manufacturers to determine among themselves which of them is to be considered the vehicle manufacturer for purposes of the labeling requirements. Such a determination is necessary in order to aid the agency in the event it must perform an audit, or other verification or enforcement proceedings regarding a particular carline. The determination of such a "manufacturer of record" would allow NHTSA to assign responsibility to one manufacturer in a joint venture arrangement. These requirements would include a provision specifying that such an agreement must be reported to the agency before the beginning of the model year.

NHTSA is also considering whether the final rule should specify a means for determining a single manufacturer in the absence of such a manufacturer agreement, *e.g.*, the manufacturer listed on the certification label for safety standards. The agency requests comments on whether such a provision should be established.

Supplier jointly owned by more than one parent company. Ford asked that NHTSA consider a supplier owned jointly by more than one parent company as an allied supplier of both parents, especially in situations such as those in Canada, in which the Canadian government has laws requiring partial Canadian ownership of share. NHTSA believes that such a situation is akin to the joint venture agreement mentioned in section 210(f)(15) of the Cost Savings Act. The agency has tentatively decided to treat the supplier in such a case as being wholly owned by one of the manufacturers in the joint venture agreement, and therefore an allied supplier for purposes of any carline jointly manufactured.

Supplier owned by parent company of the manufacturer. The agency recognizes that a supplier owned by the parent company of a manufacturer is not strictly wholly owned by the manufacturer. However, if the parent is a holding company that wholly owns both the manufacturer and the supplier, there is no meaningful difference in this situation from that in which the strict definition of "wholly owned" occurs. In other words, there are no outside interests represented (as occurs if there are outside shareholders). The interests of the parent in this situation are identical to those of the manufacturer. Therefore, the agency has tentatively decided to treat a supplier wholly owned by the parent holding company of a manufacturer as an allied supplier, provided that the parent holding company also wholly owns the manufacturer.

This is different from the situation in which a wholly-owned supplier provides equipment to a wholly-owned supplier, which then provides equipment incorporating the elements supplied to it, to the manufacturer that owns them both. GM commented that a foreign subsidiary providing equipment to a domestic subsidiary owned by the same manufacturer should be considered an allied supplier, provided the foreign subsidiary and assembly plant are both owned by the same parent. While the agency appreciates the logic of this comment, it is bound by the statute. As discussed earlier, section 210(f)(17) of the Cost Savings Act makes ownership irrelevant because a supplier, no matter who owns it, that provides equipment to an allied supplier is considered an outside supplier.

3. Consistency of the Proposed Regulations With Various Trade Agreements and Statutory Schemes

Many commenters requested that the agency draft its proposed regulation as closely as possible to the requirements of NAFTA, the CFTA, and the domestic content portion of the EPA fuel economy regulation. NHTSA has sought to do so. Unfortunately, there are major differences of purposes and requirements among the various agreements and schemes that limit the agency's ability in this regard.

NAFTA and the CFTA require information on country of origin for purposes of tariff preferences; goods with a high enough level of value originating in Canada (under both agreements) and Mexico (under NAFTA) are allowed into the U.S. without having customs duties assessed on them. Both agreements differ from each other, and from section 210, in the "cut-off" levels above which a vehicle is considered as domestic. If there is little prospect of reaching the cut-off level, there is no point in determining country of origin for a carline's parts. If the cut-off level of a carline can be reached, there is no need under either agreement for the manufacturer to track country of origin content much beyond the point at which the cut-off is reached. The EPA regulations focus on average fuel economy, and the corporate average fuel economy (CAFE) labels. The information on domestic and foreign content are collected for purposes of determining the CAFEs of domestic and foreign vehicles made by a given manufacturer. The domestic content

results in NAFTA, the CFTA, and CAFE are not placed on the new vehicle, or generally supplied to the public.

Based on the differences in purpose, and tracking requirements of section 210, NAFTA, CFTA, and CAFE schemes, the agency cannot write this regulation with identical provisions to the other three. NHTSA has tried to use similar provisions where possible, but more often has had to craft regulatory text that departs from the other schemes in order to meet the requirements of section 210.

At the February 10, 1993 meeting, the vehicle manufacturers and the AAMA requested the section 210 regulations allow a "unified reporting system" for section 210, NAFTA, the CFTA, and CAFE. Due to the differences in the schemes, the agency does not believe it is possible to establish a "unified reporting system." NHTSA encourages the individual manufacturers and suppliers to set up raw data files from which they can cull and collate the information required for each reporting scheme. The automotive industry can decide on common terms and definitions for purposes of this regulation and the other schemes discussed. Indeed, the AAMA and the U.S. manufacturers are currently working on a "universal content report" for themselves and their suppliers, which they would make available to other manufacturers, for purposes of fulfilling domestic content reporting of section 210 of the Cost Savings Act, NAFTA, CAFE, and other trade agreements (*see Automotive News*, June 28, 1993).

4. The Substantial Transformation Test

Toyota and the AIAM suggested that the agency use the substantial transformation test to determine country of origin of equipment to ease tracking burdens on suppliers and manufacturers. The language of section 210, however, frequently precludes use of the test for determination of country of origin content (*e.g.*, for outside suppliers, when using the 70 percent roll-up, roll-down determination of whether a piece of equipment is U.S./Canadian). At other times, the agency has tentatively determined to use a "greatest value added" approach to determining the country of origin of equipment. NHTSA believes this approach will be easier for manufacturers and suppliers to apply than the substantial transformation test.

As noted above, the substantial transformation test is used to determine the national origin of goods for customs purposes. To simplify, the country in which a raw material is converted into a good is considered the country of origin of the good. In the case of an unfinished good, the country in which the unfinished good is converted into a finished product is considered the country of origin of the good. There are many variations of the substantial transformation test, often based on trade treaties and agreements, such as CFTA, or NAFTA. For instance, a good may not be considered to have come from the country in which it was converted into a final product unless a certain minimum amount of its value (*e.g.*, 33 percent) was added during the conversion process in that country. Under NAFTA and the CFTA, a major factor in determining country of origin is whether a good underwent a final change in tariff classification in a given country. In any event, the full value of the good is considered to have come from the country in which the "substantial transformation" occurred.

Under section 210, different determinations of country of origin must be made. In order to complete section 210(b)(1)(A) of the label, for outside suppliers, the 70 percent roll up-roll down test must be used to answer the question of whether the equipment is to be considered U.S./Canadian. For allied suppliers, the actual dollar values of U.S./Canadian and foreign value are to be supplied to the manufacturer. Section 210(f)(12), which determines the country of origin of engines and transmissions, states that the country that contributed the greatest value is the country of origin of an engine or transmission. In order to complete section 210(b)(1)(C) of the label, which lists the two foreign countries in which at least 15 percent of the value was added to the vehicle's equipment the agency has tentatively decided that the country of origin is to be determined only by the country that was responsible for adding the greatest value to the equipment.

Use of the substantial transformation test would be inconsistent with the different treatment of allied and outside suppliers, and with the 70 percent roll-up, roll-down provisions. It would also be inconsistent with the statutory method of determining the country of origin of engines and transmissions. For purposes of section 210(b)(1)(C), however, although NHTSA could use the substantial transformation test, the agency feels that the "greatest value added" approach will be easier for manufacturers and suppliers to use than the substantial transformation test in determining which countries were major suppliers of equipment value. This avoids several problems, such as which revision of the substantial transformation test to use (*e.g.*, that listed in the CFTA, or that in NAFTA, or various other statutory or judicial interpretations), determining whether enough value was added in the U.S./Canada to justify considering substantial transformation, etc.

5. GATT

JAMA argued that section 210 may be subject to the General Agreement on Tariffs and Trade (GATT). JAMA stated that section 210 does not concern safety, but instead attempts to influence trade, and is therefore a violation of the Preamble (which calls for the reduction of barriers to trade, and elimination of discriminatory treatment in international commerce) and Article I of GATT (which sets out the rules for most-favored-nation treatment, *i.e.*, that trade concessions to one most-favored-nation be granted to all such nations). JAMA added that the U.S. is obligated to give notification of section 210 to the GATT Secretariat and allow concerned nations to make written comments under Article II.5 of GATT. Article II.5, however, pertains to complaints by countries injured by discriminatory trade practices to the injuring country, and not to notification by one country of its prospective laws to other countries.

NHTSA does not believe that section 210 contravenes the spirit or letter of GATT for the simple reason that it is informational in nature, and has no other effect. Violations of GATT occur when barriers to trade are established by raising tariffs on selected countries, or by granting preferences to local goods over foreign goods. Under section 210, no tariffs are levied and no preferences are given to vehicles based on the U.S./Canadian content. No quotas are established, and no vehicle is forbidden to be sold in the U.S. The only effect of section 210 is to advise consumers of the U.S./Canadian content of the equipment in vehicles they are considering purchasing. If a consumer is not concerned with the country of origin of a vehicle's equipment, the label would have no bearing on the purchasing decision whatsoever. If, on the other hand, a purchaser wishes to "buy American," or buy anything-but-American, the label would give that consumer information needed to help make such a decision.

6. Consumer Guide

Mitsubishi commented that a consumer information guide could be supplied at the time of purchase, presumably by the dealer, to give a simple explanation of how the label information was obtained. The agency

has decided not to propose requiring such a guide because it would be an unnecessary expense. Nevertheless, if a manufacturer wishes to supply its dealers with consumer guides, there is nothing about this proposal that would prohibit it from doing so.

IV. Rulemaking Analyses and Notices

A. DOT Regulatory Policies and Procedures

The agency has considered the economic implications of the proposed regulation and determined that the proposal is significant within the meaning of the DOT Regulatory Policies and Procedure, given the degree of public interest and the relationship to other Federal programs and agencies, particularly those related to international trade. The proposed regulation was reviewed by the Office of Management and Budget under provisions of Executive Order 12866.

The proposed regulation is strictly informational. It would not require any product changes. Its costs are, therefore, expected to be modest. Although the cost of the labeling program is uncertain, and start-up costs would be greater than the annual maintenance costs of the program, based on the one estimate the agency has received (from Chrysler), the expected costs are measured in thousands of dollars per manufacturer annually. NHTSA has prepared a Preliminary Regulatory Evaluation for this proposal, and has placed it in the docket.

The cost of each individual label, if separate from the Monroney or fuel economy labels, is estimated to be between $0.06 and $0.11. The total annual cost for labels for the estimated 14 million vehicles sold in the U.S. would be approximately $840,000 to $1,540,000. This total annual cost for labels would be lowered greatly if Parts Content Information were placed on the existing Monroney or fuel economy labels. Adding Parts Content Information to the existing labels would cost an estimated $0.01 per label, or a maximum total of $140,000 per year.

The agency estimates that the one-time compliance cost for programming would total about $80,000 per manufacturer. Therefore, for the approximately thirteen large vehicle manufacturers, the total cost to develop and implement this data system would amount to roughly $1,040,000. Annual costs for compiling and reviewing the data would amount to approximately $4,000 per manufacturer (*i.e.*, a total of $52,000 for the thirteen large manufacturers).

Manufacturers of low-U.S./Canadian parts content passenger motor vehicles that indicate that the U.S./Canadian content of a carline is minimal would incur annual costs for programming and review of content data of approximately $320 per manufacturer. Total cost for the approximately fourteen small and import manufacturers would be roughly $4,480 annually.

B. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, the agency has considered the impact this rulemaking would have on small entities. I certify that this action would not have a significant economic impact on a substantial number of small entities. Therefore, a regulatory flexibility analysis is not required for this action. Although certain small businesses, such as parts suppliers and some vehicle manufacturers, would be affected by the proposed regulation, the effect on them would be minor. The agency cannot estimate the costs of programming, compilation, and review of the data for the approximately 15,000 equipment suppliers to passenger vehicle manufacturers. Large suppliers producing hundreds of parts could have significant costs, compared with small suppliers. The agency requests comments on costs for equipment suppliers.

C. National Environmental Policy Act

The agency has analyzed the environmental impacts of the proposed regulation in accordance with the National Environmental Policy Act, 42 U.S.C. 4321 *et seq.*, and has concluded that it would not have a significant effect on the quality of the human environment.

D. Executive Order 12612 (Federalism)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that the proposed rule would not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment.

E. Paperwork Reduction Act

The reporting and recordkeeping requirements associated with this proposed rule are being submitted to the Office of Management and Budget for approval in accordance with 44 U.S.C. chapter 35. *Administration:* National Highway Traffic Safety Administration; *Title:* Automobile Parts Content Labeling (49 CFR part 583); *Need for Information:* To assess compliance with parts content labeling regulation; *Proposed Use of Information:* To determine if manufacturers and suppliers are complying with parts labeling content regulation; *Frequency:* annually; *Respondents:* 70; *Form(s):* 1; *Average Burden Hours for Respondent:* 100.

F. Executive Order 12778 (Civil Justice Reform)

This proposed rule would not have any retroactive effect. States would be preempted from promulgating laws and regulations contrary to the provisions of the proposed rule. The proposed rule does not require submission of a petition for reconsideration or other administrative proceedings before parties may file suit in court.

Request for Comments

Interested persons are invited to submit comments on the proposal. It is requested but not required that 10 copies be submitted.

All comments must not exceed 15 pages in length. (49 CFR 553.21). Necessary attachments may be appended to these submissions without regard to the 15-page limit. This limitation is intended to encourage commenters to detail their primary arguments in a concise fashion.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including purportedly confidential business information, should be submitted to the Chief Counsel, NHTSA, at the street address given above, and seven copies from which the purportedly confidential information has been deleted should be submitted to the Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in the agency's confidential business information regulation. 49 CFR part 512.

All comments received before the close of business on the comment closing date indicated above for the proposal will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Comments received too late for consideration in regard to the final rule will be considered as suggestions for further rulemaking action. Comments on the proposal will be available for inspection in the docket. NHTSA will continue to file relevant information as it becomes available in the docket after the closing date, and it is recommended that interested persons continue to examine the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rules docket should enclose a self-addressed, stamped postcard in the envelope with their comments. Upon receiving the comments, the docket supervisor will return the postcard by mail.

List of Subjects in 49 CFR Part 583

Motor vehicles, Imports, Labeling, Reporting and recordkeeping requirements.

In consideration of the foregoing, NHTSA proposes to amend chapter V of title 49 of the Code of Federal Regulations as follows:

1. Part 583 would be added to read as follows:

PART 583—AUTOMOBILE PARTS CONTENT LABELING

Sec.

583.1 Scope.
583.2 Purpose.
583.3 Applicability.
583.4 Definitions.
583.5 Label requirements.
583.6 Procedure for determining U.S./Canadian parts content.
583.7 Procedure for determining major foreign sources of passenger motor vehicle equipment.
583.8 Procedure for determining country of origin for individual engines and transmissions.
583.9 Attachment and maintenance of label.
583.10 Outside suppliers of passenger motor vehicle equipment.
583.11 Allied suppliers of passenger motor vehicle equipment.
583.12 Suppliers of engines and transmissions.
583.13 Supplier certification.
583.14 Currency conversion rate.
583.15 Joint ownership.
583.16 Maintenance of records.
583.17 Reporting.

Authority: 15 U.S.C. 1950; 49 CFR 1.50, 501.2(f).

§ 583.1 Scope

This part establishes requirements for the disclosure of information relating to the countries of origin of new passenger motor vehicles and their equipment.

§ 583.2 Purpose.

The propose of this part is to aid potential purchasers in the selection of new passenger motor vehicles by providing them with information about the value of the U.S./Canadian and foreign parts content of each vehicle, the countries of origin of the engine and transmission, and the site of the vehicle's final assembly.

§ 583.3 Applicability.

This part applies to manufacturers of new passenger motor vehicles manufactured or imported for sale in the United States, suppliers of passenger motor vehicle equipment, and dealers of new passenger motor vehicles.

§ 583.4 Definitions.

(a) *Statutory terms.* The terms *allied supplier, country of origin, dealer, final assembly point, foreign, foreign content, manufacturer, new passenger motor vehicle of U.S./Canadian origin, originated in the United States and Canada, outside supplier, passenger motor vehicle, percentage (by value), person, Secretary, State, U.S./Canadian, value added in the United States and Canada,* defined in section 210(f) of the Cost Savings Act (15 U.S.C. 1950(f)) as amended, are used in accordance with their statutory meanings except as further defined in paragraph (b) of this section.

(b) *Other terms. (1) Administrator* means the Administrator of the National Highway Traffic Safety Administration.

(2) *Carline* means a name denoting a group of vehicles which as a degree of commonality in construction (*e.g.*, body, chassis). Carline does not consider any level of decor or opulence and is not generally distinguished by such characteristics as roof line, number of doors, seats, or windows, except for light duty trucks. Carline is not distinguished by country of manufacturer or final assembly point. Light duty trucks are considered to be different carlines than passenger cars. A carline includes all motor vehicles of a given nameplate. Two-wheel and four-wheel drive versions of a vehicle type are treated as the same carline, except that two-wheel and four-wheel drive versions of a light truck are treated as separate carlines. Utility vehicles, vans, and pickup trucks are classified as separate carlines.

(3) *Final assembly* means all operations involved in the assembly of a vehicle beginning, with respect to the body, at the point at which the body leaves the paint shop and, with respect to the chassis, at the point where the engine and transmission are placed on the chassis frame or, in the case of unit body vehicles, on the assembly cradle or jig.

(4) *Final assembly point* means the plant, factory, or other place at which a new passenger motor vehicle is produced or assembled by a manufacturer and from which such vehicle is delivered to a dealer or importer in such a condition that all component parts necessary to the mechanical operation of such automobile are included with such vehicle whether or not such component parts are permanently installed in or on such vehicle. For plants and factories where both pre-final-assembly operations (production of items of motor vehicle equipment, painting of the vehicle body, assembly of the chassis) and final assembly operations take place, the meaning of final assembly point is limited to the area where final assembly operations take place.

(5) *Passenger Motor Vehicle Equipment* means any system, subassembly, or component received at the final assembly point for installation on, or attachment to, such vehicle at the time of its initial shipment by the manufacturer to a dealer for sale to an ultimate purchaser. Passenger motor vehicle equipment includes all items for which the manufacturer specifies parts numbers, except attachment hardware such as nuts, bolts, clips, screws, pins, and braces. Passenger motor vehicle equipment also includes any system, subassembly, or component received by an allied supplier from on outside supplier for incorporation into equipment supplied by the allied supplier to the manufacturer with which it is allied.

§ 583.5 Label requirements.

(a) Except as provided in paragraphs (e), (f) and (g) of this section, each manufacturer of new passenger motor vehicles shall cause to be affixed to each passenger motor vehicle manufactured on or after October 1, 1994, a label that provides the following information:

(1) *U.S./Canadian parts content.* The overall percentage, by value, of the passenger motor vehicle equipment that was installed on vehicles within the carline of which the vehicle is part, and that originated in the United States/or Canada (the procedure for determining U.S./Canadian Parts Content is set forth in § 583.6);

(2) *Major sources of foreign parts content.* The names of any countries other than the United States and Canada which contributed at least 15 percent of the average overall percentage, by value, of the passenger motor vehicle equipment installed on vehicles within the carline of which the vehicle is part, and the percentages attributable to each such country (if there are more than two such countries, the manufacturer need only provide the information for the two countries with the highest percentages; the procedure for determining major foreign sources of passenger motor vehicle equipment is set forth in § 583.7);

(3) *Final assembly point.* The city, state (in the case of vehicles assembled in the United States), and country of the final assembly point of the passenger motor vehicle;

(4) *Country of origin for the engine.* The country of origin of the passenger motor vehicle's engine (the procedure for determining the country of origin for the engine is set forth in § 583.8);

(5) *Country of origin for the transmission.* The country of origin of the passenger motor vehicle's transmission (the procedure for determining the country of origin for the transmission is set forth in § 583.8);

(6) *Explanatory note.* A statement which explains that the parts content of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

(b) Except as provided in paragraphs (e), (f) and (g) of this section, the label required under paragraph (a) of this section shall read as follows (except that if there are no major sources of foreign parts content, omit the phrase "Major Sources of Foreign Parts Content"):

For vehicles in this carline:
U.S./Canadian Parts Content: (insert number) %
Major Sources of Foreign Parts Content:
(name of country with highest percentage): (insert number) %
(name of country with second highest percentage): (insert number) %
For this vehicle:
Final Assembly Point: (city, state, country)
Country of Origin:
Engine: (name of country)
Transmission: (name of country)

Note: The PARTS CONTENT of a typical vehicle makes up about [a range would be specified in the final rule] percent of the vehicle's total wholesale cost to the dealer.

(c) The percentages required to be provided under paragraph (a) of this section may be rounded by the manufacturer to the nearest 5 percent.

(d) The label required by paragraph (a) of this section shall:

(1) Be placed in a prominent location on each vehicle where it can be read from the exterior of the vehicle, and shall be either a separate label, a part of the Monroney price information label required by 15 U.S.C. 1232, or a part of the fuel economy label required by U.S.C. 2006.

(2)(i) Be printed in letters that have a color that contrasts with the background of the label; and

(ii) Have the information required by paragraphs (a) (1) through (5) of this section vertically centered on the label in boldface capital letters and numerals of 12 point size or larger; and

(iii) Have the information required by paragraph (a)(6) of this section in type that is two points smaller than the information required by paragraphs (a) (1) through (5) of this section.

(3) In the case of a label that is a separate label, be rectangular with a minimum width of 5.0 inches (125 mm) and a minimum length of 3.0 inches (75 mm).

(4) In the case of a label that is included as part of the Monroney price information label or fuel economy label, be separated from all other information on those labels by a solid line that is a minimum of three points in width.

(5) The information required by paragraphs (a) (1) through (6) of this section shall be immediately preceded by the words, "PARTS CONTENT INFORMATION," in boldface, underlined capital letters that are at least 2 point sizes larger than the information required by paragraphs (a) (1) through (5) of this section.

(e) In the case of a passenger motor vehicle for which the U.S./Canadian parts content, as determined under paragraph (a)(1) of this section, is 35 percent or less (without rounding), the manufacturer may specify the U.S./Canadian Parts Content as "Minimal."

(f) A final stage manufacturer of vehicles assembled in multiple stages need not provide the U.S./Canadian Parts Content or Major Foreign Sources items of the label otherwise required under paragraphs (a) (1) and (2) of this section for vehicles in carlines in which the total carline production for a model year is fewer than 1000 vehicles.

(g) A manufacturer that produces a total of fewer than 1000 passenger motor vehicles in a model year is not required to provide the U.S./Canadian Parts Content or Major Foreign Sources items of the label otherwise required under paragraphs (a) (1) and (2) of this section.

§ 583.6 Procedure for determining U.S./Canadian parts content.

(a) Each manufacturer, except as specified in § 583.5(e) through (g) shall determine the percentage U.S./Canadian Parts Content for each carline on a model year basis, before the beginning of each model year. Items of equipment produced at a plant or factory which includes the final assembly point are treated in the same manner as if they were supplied by an allied supplier.

(b) *Determining the value of items of equipment.* (1) The value of each item of equipment, other than a vehicle body or chassis, not produced at the final assembly point, is the price paid by the manufacturer for the equipment as delivered to the final assembly point.

(2) The value of a vehicle body is the price paid for the body, plus the value of the painting of the body and any prepainting operatings such as finishing. The value of a chassis is the price paid for the components comprising the chassis, plus the value of any operations assembling the chassis.

(3) The value of each item of equipment produced at a plant which includes the final assembly point is the fair market price that a manufacturer of similar size and location would pay a supplier for such equipment.

(c) *Determining the U.S./Canadian percentage of the value of items of equipment.* (1) Equipment supplied by an outside supplier to a manufacturer is considered:

(i) 100 percent U.S./Canadian, if 70 percent or more of its value is added in the United States or Canada; and

(ii) 0 percent U.S./Canadian, if less than 70 percent of its value is added in the United States or Canada.

(2) The extent to which an item of equipment supplied by an allied supplier is considered U.S./Canadian is determined by dividing the value added in the United States and Canada by the total value of the equipment. The resulting number is multiplied by 100 to determine the percentage U.S./Canadian content of the equipment.

(3) In determining the value added in the United States and Canada of equipment supplied by an allied supplier, any equipment that is delivered to the allied supplier by an outside supplier and is incorporated into the allied supplier's equipment, is considered:

(i) 100 percent U.S./Canadian, if at least 70 percent of its value is added in the United States or Canada; and

(ii) 0 percent U.S./Canadian, if less than 70 percent of its value is added in the United States or Canada.

(d) *Determination of the U.S./Canadian percentage of the total value of a carline's passenger motor vehicle equipment.* The percentage of the value of a carline's passenger motor vehicle equipment that is U.S./Canadian is determined by—

(1) Adding the total value of all of the equipment (regardless of country of origin) to be installed in that carline during the next model year;

(2) Dividing the value of the U.S./Canadian content of such equipment by the amount calculated in paragraph (d)(1) of this section; and

(3) Multiplying the resulting number by 100.

§ 583.7 Procedure for determining major foreign sources of passenger motor vehicle equipment.

(a) Each manufacturer, except as specified in § 583.5(f) and (g), shall determine the countries, if any, which are major foreign sources of passenger motor vehicle equipment and the percentages attributable to each such country for each carline on a model year basis, before the beginning of each

model year. The manufacturer need only determine this information for the two such countries with the highest percentages. Items of equipment produced at a plant or factory which includes the final assembly point are treated in the same manner as if they were supplied by an allied supplier.

(b) *Determining the value of items of equipment.* The value of each item of equipment is determined in the manner specified in § 583.6(b).

(c) *Determining the country of origin of items of equipment.* The country of origin of each item of equipment is the country which contributes the greatest amount of value added to that item.

(d) *Determination of the percentage of the total value of a carline's passenger motor vehicle equipment which is attributable to individual countries other than the U.S. and Canada.* The percentage of the value of a carline's passenger motor vehicle equipment that is attributable to each country other than the U.S. and Canada is determined on a model year basis by—

(1) Adding up the total value of all of the passenger motor vehicle equipment (regardless of country of origin) to be installed in that carline during the next model year;

(2) Adding up the value of such equipment which originated in each country other than the U.S. or Canada;

(3) Dividing the amount calculated in paragraph (d) (2) of this section for each country by the amount calculated in paragraph (d)(1) of this section, and multiplying each result by 100.

(e) A country is a major foreign source of passenger motor vehicle equipment for a carline only if the country is one other than the U.S. or Canada and if 15 or more percent of the total value of the carline's passenger motor vehicle equipment is attributable to the country.

§ 583.8 Procedure for determining country of origin for individual engines and transmissions.

(a) Each supplier of an engine or transmission shall determine the country of origin for each individual engine and transmission. The U.S. and Canada are treated separately in making such determination.

(b) The value of an engine or transmission is determined by adding up the prices paid by the manufacturer of the engine/transmission for each component comprising the engine/transmission, as delivered to the assembly point of the engine/transmission. No other costs, including the costs of assembling the engine/transmission, are included in the value of the engine/transmission.

(c) The country of origin of each engine and the country of origin of each transmission is the country which contributes the greatest amount of value added to that item of equipment.

§ 583.9 Attachment and maintenance of label.

(a) Each manufacturer shall affix the label required by § 583.5 to each new passenger motor vehicle before shipment of the completed vehicle from the final assembly point.

(b) Each dealer shall cause to be maintained each label on the new passenger motor vehicles it receives until after such time as a vehicle has been sold to a consumer for purposes other than resale. If a label becomes damaged so that the information it contains is not legible, the dealer shall replace it with an identical, undamaged label.

§ 583.10 Outside suppliers of passenger motor vehicle equipment.

(a) For each unique type of passenger motor vehicle equipment which an outside supplier supplies to a manufacturer or allied supplier, the outside supplier shall provide the manufacturer/allied supplier with a certificate providing the following information:

(1) The name and address of the supplier;

(2) A description of the unique type of equipment;

(3) The price of the equipment to the manufacturer or allied supplier;

(4) A statement that the equipment has, or does not have, at least 70 percent of its value added in the United States and Canada, determined under § 583.6(c);

(5) For equipment which has less than 70 percent of its value added in the United States and Canada, the country of origin of the equipment, determined under § 583.7(c);

(6) A certification for the information, pursuant to § 583.13, and the date (at least giving the month and year) of the certification.

(b) (1) Except as provided in paragraph (b)(3) of this section, the certification required by paragraph (a) of this section shall be provided to each allied supplier by May 1 of each year and to each manufacturer by June 1 of each year, for all equipment which the allied supplier has a contract to supply during the 12 month period beginning on July 1 of that year.

(2) Except as provided in paragraph (b)(4) of this section, the information provided in the certificate shall be the supplier's best estimates of price, content, and country of origin for the unique type of equipment expected to be supplied during the 12 month period beginning on July 1 of that year. If the unique type of equipment supplied by the supplier is expected to vary with respect to price, content, and country of origin during that period, the supplier shall base its estimates on expected averages for these factors.

(3) The dates set forth in paragraph (b)(1) of this section for receipt of the certificate may be altered by contract between the outside supplier and the allied supplier or manufacturer to which the supplier sells its passenger motor vehicle equipment. If the dates are altered by contract, the outside supplier shall provide the certificate by the date set forth in the contract.

(4) The period specified in paragraph (b)(2) of this section for which estimates of price, content, and country of origin are to be based may be altered by contract between the outside supplier and the allied supplier or manufacturer to which the supplier sells its passenger motor vehicle equipment. However, such alteration may only be made if the manufacturer makes a determination that the alteration is not likely to result in less accurate information being provided to consumers on the label required by this part.

§ 583.11 Allied suppliers of passenger motor vehicle equipment.

(a) For each unique type of passenger motor vehicle equipment which an allied supplier supplies to the manufacturer with which it is allied, the allied supplier shall provide the manufacturer with a certificate providing the following information:

(1) The name and address of the supplier;

(2) A description of the unique type of equipment;

(3) The price of the equipment to the manufacturer;

(4) The percentage U.S./Canadian content of the equipment, determined under § 583.6(c);

(5) The country of origin of the equipment, determined under § 583.7(c);

(6) A certification for the information, pursuant to § 583.13, and the date (at least giving the month and year) of the certification.

(b) (1) Except as provided in paragraph (b)(3) of this section, the certification required by paragraph (a) of this section shall be provided to the manufacturer by June 1 of each year, for all equipment which the allied supplier has a contract to supply during the 12 month period beginning on July 1 of that year.

(2) Except as provided in paragraph (b)(4) of this section, the information provided in the certificate shall be the supplier's best estimates of price, content, and country of origin for the unique type of equipment expected to be supplied during the 12 month period beginning on July 1 of that year. If the unique type of equipment supplied by the supplier is expected to vary with respect to price, content, and country of origin during that period, the supplier shall base its estimates on expected averages for these factors.

(3) The dates set forth in paragraph (b)(1) of this section for receipt of the certificate may be altered by contract between the allied supplier and the manufacturer. If the dates are altered by contract, the allied supplier shall provide the certificate by the date set forth in the contract.

(4) The period specified in paragraph (b)(2) of this section for which estimates of price, content, and country of origin are to be based may be altered by contract between the allied supplier and the manufacturer. However, such alteration may only be made if the manufacturer makes a determination that the alteration is not likely to result in less accurate information being provided to consumers on the label required by this part.

§ 583.12 Suppliers of engines and transmissions.

(a) For each engine or transmission which a supplier supplies to a manufacturer or allied supplier, the supplier of such engine or transmission shall provide the manufacturer or allied supplier with a certificate providing the following information:

(1) The name and address of the supplier;

(2) A description of the engine or transmission;

(3) The country of origin of the engine or transmission, determined under § 583.8;

(4) A certification for the information, pursuant to § 583.13, and the date (at least giving the month and year) of the certification.

(b) The certificate required by paragraph (a) of this section shall be provided to the allied supplier or manufacturer no later than the time of the delivery of the engine or transmission.

(c) A single certificate may cover multiple engines or transmissions. If a certificate provided in advance of the delivery of an engine or transmission becomes inaccurate because of changed circumstances, a corrected certificate shall be provided no later than the time of delivery of the engine or transmission.

§ 583.13 Supplier certification.

Each supplier shall certify the information on each certificate provided under §§ 583.10, 583.11, and 583.12 by including the following phrase on the certificate: "This information is certified in accordance with DOT regulations." The phrase shall immediately precede the other information on the certificate.

§ 583.14 Currency conversion rate.

For purposes of calculations of content value under this part, manufacturers and suppliers shall calculate exchange rates using the methodology set forth in this section.

(a) *Manufacturers.* (1) Unless a manufacturer has had a petition approved by the Environmental Protection Agency under 40 CFR 600.511–80(b)(1), for all calculations made by the manufacturer as a basis for the information provided on the label required by § 583.5, manufacturers shall take the mean of the exchange rates in effect at the end of each quarter set by the Federal Reserve Bank of New York for twelve calendar quarters prior to and including the calendar quarter ending one year prior to the date that the manufacturer submits information for a carline under § 583.17.

(2) A manufacturer that has had a petition approved by the Environmental Protection Agency under 40 CFR 600.511–80(b)(1), which provides for a different method of determining exchange rates, shall use the same method as a basis for the information provided on the label required by § 583.5, and shall inform the Administrator of the exchange rate method it is using at the time the information required by § 583.5 is submitted.

(b) *Supplies.* For all calculations underlying the information provided on each certificate required by §§ 583.10, 583.11, and 583.12, suppliers shall take the mean of the exchange rates in effect at the end of each quarter set by the Federal Reserve Bank of New York for twelve calendar quarters prior to and including the calendar quarter ending one year prior to the date of such certificate.

§ 583.15 Joint ownership.

(a) A carline jointly owned and/or produced by more than one manufacturer shall be attributed to the single manufacturer that markets the carline, subject to paragraph (b) of this section.

(b) (1) The joint owners of a carline may designate, by written agreement, one of them to be the manufacturer of record of that carline.

(2) The manufacturer of record is responsible for compliance with all the manufacturer requirements in this part with respect to the jointly owned carline.

(3) A designation under this section of a manufacturer of record is effective beginning with the first model year beginning after the conclusion of the written agreement, or, if the joint owners so agree in writing, with a specified later model year.

(4) Each manufacturer of record shall send to the Administrator written notification of its designation as such not later than 30 days after the conclusion of the written agreement, and state the carline of which it is considered the manufacturer, the names of the other persons which jointly own the carline, and the name of the person, if any, formerly considered to be the manufacturer of record.

(5) The joint owners of a carline may change the manufacturer of record for a future model year by concluding a written agreement before the beginning of that model year.

(6) All new passenger motor vehicles in the jointly owned carline are included in the fleet of the manufacturer of record.

(7) The allied suppliers for the jointly owned carline are the suppliers that are wholly owned by any of the manufacturers of the jointly owned carline.

§ 583.16 Maintenance of records.

(a) *General.* Each manufacturer of new passenger motor vehicles and each supplier of passenger motor vehicle equipment subject to this part shall establish, maintain, and retain in organized and indexed form, records as specified in this section. Manufacturers and allied suppliers shall maintain the original copies of certificates provided to them by suppliers pursuant to §§ 583.10, 583.11, and 538.12. All other records may be converted to other forms (e.g., microfilm, microfiche, punch cards, and electronic storage) for purposes of data storage, provided that in every case all the information contained in the record is retained.

(b) *Manufacturers.* Each manufacturer shall maintain all records which provide a basis for the information it provides on the labels required by § 583.5, including, but not limited to, certificates from suppliers, parts lists, calculations of content, and relevant contracts with suppliers. The records shall be maintained for five years after December 31 of the model year to which the records relate.

(c) *Suppliers.* Each supplier shall maintain all records which form a basis for the information it provides on the certificates required by §§ 583.10, 583.11, and 583.12, including, but not limited to, calculations of content, certificates from suppliers, and relevant contracts with manufacturers and suppliers. The records shall be maintained for six years after December 31 of the calendar year set forth in the date of each certificate.

§ 583.17 Reporting.

For each model year, manufacturers shall submit to the Administrator 3 copies of the information required by § 583.5 (a), (e), (f), or (g) (whichever is applicable) to be placed on a label for each carline. The information for each carline shall be submitted not later than the date the first vehicle of the carline is delivered to dealers for that model year.

Issued: November 15, 1993.

Barry Felrice,

Associate Administrator for Rulemaking.

For vehicles in this carline:
U.S./Canadian Parts Content: 50%
Major Source of Foreign Parts Content:
Japan: 20%
Mexico: 15%

For this vehicle:
Final Assembly Point: Flint, Michigan, USA
Country of Origin:
Engine: U.S.
Transmission: Canada

Note: The PARTS CONTENT of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

For vehicles in this carline:
U.S./Canadian Parts Content: Minimal
Major Source of Foreign Parts Content:
Italy: 90%

For this vehicle:
Final Assembly Point: Turin, Italy
Country of Origin:
Engine: Italy
Transmission: Italy

Note: The PARTS CONTENT of a typical vehicle makes up about (a range would be specified in a final rule) percent of the vehicle's total wholesale cost to the dealer.

Final Assembly Point for this Vehicle:
Phoenix, AZ

Country of Origin for this Vehicle:
Engine: Mexico
Transmission: U.S.

[FR Doc. 93–28392 Filed 11–18–93; 8:45 am]
BILLING CODE 4910-59-M

Notices

Federal Register
Vol. 58, No. 222
Friday, November 19, 1993

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Food Safety and Inspection Service

[Docket No. 93–025N]

FLD Policy Memoranda; Semi-Annual Listing

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Notice.

SUMMARY: This document lists and makes available to the public a memorandum which was issued by the Food Labeling Division (FLD), (formerly the Standards and Labeling Division), Regulatory Programs, Food Safety and Inspection Service (FSIS). This memorandum contains a significant new application or an interpretation of the Federal Meat Inspection Act, the Poultry Products Inspection Act, the regulations promulgated thereunder, or departmental policy concerning labeling.

FOR FURTHER INFORMATION CONTACT: Cheryl Wade, Director, Food Labeling Division, Regulatory Programs, Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, DC 20250, (202) 254–2590.

SUPPLEMENTARY INFORMATION: Pursuant to section 7 of the Federal Meat Inspection Act (21 U.S.C. 607 *et seq.*) and section 8 of the Poultry Products Inspection Act (21 U.S.C. 457 *et seq.*), and the regulations promulgated thereunder (9 CFR 301.1 *et seq.* and 9 CFR 381.1 *et seq.*), meat and poultry products which do not bear approved labels or other labeling may not be distributed in commerce for use as human food. Accordingly, FSIS conducts a prior approval program for labels or other labeling (specified in 9 CFR 317.4, 317.5, 381.132 and 381.134) to be used on or in conjunction with federally inspection meat and poultry products.

FSIS's prior labeling approval program is conducted by labeling review experts within FLD. A variety of factors, such as continuing technological innovations in food processing and expanded public concern regarding the presence of various substances in foods, has generated a series of increasingly complex issues which FLD must resolve as part of the prior labeling approval process. In interpreting the Acts and regulations to resolve these issues, FLD may modify its policies on labeling or develop new ones.

Significant or novel interpretations or determinations made by FLD are issued in writing in memorandum form. This document lists one FLD policy memorandum which was issued during the period of April 1, 1993, through October 1, 1993.

Persons interested in obtaining a copy of the FLD policy memorandum, or in being included on a list for automatic distribution of future FLD policy memoranda, may write to: Printing and Distribution Section, Paperwork Management Branch, Administrative Services Division, Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, DC 20250.

Memo No.	Title and date	Issue	Reference
108B	Water-Misted and Ice-Glazed Meat and Poultry Products, June 24, 1993.	What is the appropriate labeling for meat and poultry products that are protected with a thin layer of water or ice, or treated with a water-mist to prevent shrinkage during freezing?.	9 CFR 319.15; 9 CFR 381.170.

The FLD policy specified in this memorandum will be uniformly applied to all relevant labeling applications unless modified by future memoranda or more formal Agency actions. Applicants retain all rights of appeal regarding decisions based upon these memoranda.

Cheryl Wade,

Director, Food Labeling Division, Regulatory Programs.

[FR Doc. 93–28533 Filed 11–18–93; 8:45 am]

BILLING CODE 3410-DM-M

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 54–93]

Proposed Foreign-Trade Zone—Jackson County, OR; Application and Public Hearing

An application has been submitted to the Foreign-Trade Zones Board (the Board) by Jackson County, Oregon, an Oregon municipal corporation and Home Rule county, requesting authority to establish a general-purpose foreign-trade zone at sites in the Medford-Jackson County, Oregon area. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a–81u), and the regulations of the Board (15 CFR part 400). It was formally filed on November 4, 1993. The applicant is authorized to make the proposal under Oregon Revised Statute 307.850. An application is pending with the U.S. Customs Service requesting the designation of the Medford-Jackson County Airport as a Customs user fee port facility.

The proposed foreign-trade zone would consist of 6 sites (528 acres) in the Cities of Medford, White City and Eagle Point (Jackson County), Oregon: *Site 1* (95 acres)—airport site, 3650 Biddle Road in Medford, within the Medford—Jackson County Airport complex; *Site 2* (38 acres)—King Business Center, Lear Way, Cardinal Avenue and Commerce Drive, west of Crater Lake Highway, Medford, adjacent to the Medford-Jackson County Airport; *Site 3* (54 acres)—North Medford Business Center, Bulcrest Drive, Gruman Drive and Kingsley Drive, west of Crater Lake Highway, Medford, one

mile north of the airport; *Site 4* (215 acres)—North Medford Business Center, Avenue H, 11th Street, Avenue A and Pacific Avenue, White City, (Jackson County), four and one-half miles north of the airport; *Site 5* (23 acres)—Light Valley Site, 10440 South Fork Little Butte Creek Road, Eagle Point (Jackson County), including the Oregon Wildlife Center and the Light Valley Tree Farm; and, *Site 6* (103 acres)—KOGAP Business Center, 2080 South Pacific Highway, Medford, 5 miles south of the airport. Site 1 is owned by the County; Sites 2,3 and 4, by Burrill Properties, Inc.; Site 5 by Ralph Wehinger; and Site 6 by KOGAP Manufacturing Company. Ore-Cal Trade Corporation has been designated as the proposed zone operator.

The application contains evidence of the need for zone services in the Medford-Jackson County area. Several firms have indicated an interest in using zone procedures for warehousing/distribution of such items as electronic components, lumber, hardwood products, sports equipment, toys, machinery and equipment, ski industry equipment and household products. Specific manufacturing approvals are not being sought at this time. Requests would be made to the Board on a case-by-case basis.

In accordance with the Board's regulations (as revised, 56 FR 50790–50808, 10–8–91), a member of the FTZ Staff has been designated examiner to investigate the application and report to the Board.

As part of the investigation, the Commerce examiner will hold a public hearing on January 6, 1994, at 9 a.m., in the Auditorium of the Jackson County Courthouse, 10 South Oakdale, Medford, Oregon.

Public comment on the application is invited from interested parties. Submissions (original and 3 copies) shall be addressed to the Board's Executive Secretary at the address below. The closing period for their receipt is January 24, 1994. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to February 8, 1994).

A copy of the application and accompanying exhibits will be available during this time for public inspection at the following locations:

County Administrator's Office, Jackson County, Oregon, 10 S. Oakdale, Medford, Oregon 97501.

Office of the Executive Secretary, Foreign-Trade Zones Board, room 3716, U.S. Department of Commerce, 14th & Pennsylvania Avenue NW., Washington, DC 20230.

Dated: November 10, 1993.

John J. Da Ponte, Jr.,

Executive Secretary.

[FR Doc. 93–28539 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-DS-P

[Docket 55–93]

Foreign-Trade Zone 148—Knoxville, TN; Application for Subzone; SmithKline Beecham Pharmaceutical Plant, Bristol, TN

An application has been submitted to the Foreign-Trade Zones Board (the Board) by the Industrial Board of Blount County, Tennessee, grantee of FTZ 148, requesting special-purpose subzone status for the pharmaceutical manufacturing facilities of the SmithKline Beecham Corporation (SBC) in Bristol, Tennessee. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a–81u), and the regulations of the Board (15 CFR part 400). It was formally filed on November 8, 1993.

The SBC plant (40 acres, 286,599 square feet, 1 bldg.) is located at 201 Industrial Drive, Bristol (Sullivan County), some 100 miles northeast of Knoxville. The facilities (310 employees) are used to produce both human and animal health prescription drugs, primarily antibiotics, such as oral semi-synthetic penicillins, including "Augmentin" and "Amoxil" human health products and, "Amoxi-Bol" and "Amoxi-Drops" animal health products.

Currently, foreign-sourced materials account for, on average, 23 percent of the finished product value and include the following specific ingredients: potassium clavulanate/(amoxicillin/Avicel/Syloid) and amoxicillin. The company also may purchase from abroad items in the following general product categories: gums, starches, waxes, vegetable extracts, animal and vegetable oils, glycerine, ethyl alcohol, bran, sharps and other residues, salt, clays, gypsum, talc, oxygen-function amino compounds, antibiotics and medicaments.

Zone procedures would exempt SBC from Customs duty payments on foreign materials used in production for export. On domestic sales, the company would be able to choose the duty rates that apply to the finished products (duty-free to 45%, most falling in the 3.7%–6.2% range). The duty rates on foreign-sources items range from duty-free to 49 percent, with most falling in the 3.7–7.4 percent range. The application indicates that zone savings will help improve the plant's international competitiveness.

In accordance with the Board's regulations, a member of the FTZ Staff has been designed examiner to investigate the application and report to the Board.

Public comment is invited from interested parties. Submisions (original and 3 copies) shall be addressed to the Board's Exectuive Secretary at the address below. The closing period for their receipt is January 18, 1994. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period to February 2, 1994.

A copy of the application and accompanying exhibits will be available for public inspection at each of the following locations:

U.S. Department of Commerce District Office, 301 E. Church Av., Knoxville, TN 37915.

Office of the Executive Secretary, Foreign-Trade Zones Board, U.S. Department of Commerce, room 3716. 14th & Pennsylvania Avenue NW., Washington, DC 20230.

Dated: November 15, 1993.

John J. Da Ponte, Jr.,

Executive Secretary.

[FR Doc. 93–28540 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-DS-P

International Trade Administration

[C–401–401]

Certain Carbon Steel Products From Sweden; Preliminary Results of Countervailing Duty Administrative Review

AGENCY: International Trade Administration/Import Administration, Department of Commerce.

ACTION: Notice of preliminary results of countervailing duty Administrative Review.

SUMMARY: The Department of Commerce is conducting an administrative review of the countervailing duty order on certain carbon steel products from Sweden. We preliminarily determine the net subsidy to be 4.27 percent *ad valorem* for the period January 1, 1991 through December 31, 1991. We invite interested parties to comment on these preliminary results.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Stephanie Moore or Maria MacKay, Office of Countervailing Compliance, International Trade Administration, U.S. Department of Commerce, Washington, DC 20230; telephone: (202) 482–2786.

SUPPLEMENTARY INFORMATION:

Background

On October 8, 1992, the Department of Commerce (the Department) published in the **Federal Register** a notice of "Opportunity to Request Administrative Review" (57 FR 46371) of the countervailing duty order on certain carbon steel products from Sweden (50 FR 41547; October 4, 1985). On October 30, 1992 the U.S. Steel Group of USX Corporation, petitioner, requested an administrative review of the order covering the period January 1, 1991 through December 31, 1991 (57 FR 56318). We published the initiation notice on November 27, 1992. The Department is now conducting the review in accordance with section 751 of the Tariff Act of 1930, as amended (the Act).

Scope of Review

Imports covered by this review are shipments from Sweden of cold-rolled carbon steel flat-rolled products, whether or not corrugated or crimped; whether or not pickled, not cut, not pressed and not stamped to non-rectangular shape; not coated or plated with metal and not clad; over 12 inches in width and of any thickness; whether or not in coils. During the period of review this merchandise was classified under item numbers 7209.11.00, 7209.12.00, 7209.13.00, 7209.21.00, 7209.22.00, 7209.23.00, 7209.24.50, 7209.31.00, 7209.32.00, 7209.33.00, 7209.34.00, 7209.41.00, 7209.43.00, 7209.44.00, 7209.90.00, 7211.30.50, 7211.41.70 and 7211.49.50 of the Harmonized Tariff Schedule (HTS). The HTS item numbers are provided for convenience and Customs purposes. The written description remains dispositive.

The review covers the period January 1, 1991 through December 31, 1991 and twelve programs. Svenskt Stal AB (SSAB) was the only Swedish producer and/or exporter of the subject merchandise exported to the United States during the review period.

Analysis of Programs

Privatization

SSAB was partially privatized on two occasions. The first partial privatization took place in 1987 when the Government of Sweden (GOS), which by then had become the sole owner of SSAB, sold one-third of its shares in the company to a consortium of six institutional investors. A second partial privatization followed in 1989 when the GOS and the institutional investors sold part of their shareholdings in a public offer.

In the Final Affirmative Countervailing Duty Determinations: Certain Carbon Steel Products from Sweden (58 FR 37387; July 9, 1993) (Carbon Steel Flat Products), we determined that a portion of the price paid for a formerly government-owned company represents partial repayment of prior subsidies. We calculated the portion of the purchase price attributable to repayment of prior subsidies. We then reduced the benefit streams for each program by the ratio of the repayment amount to the net present value of all remaining benefits at the time of privatization. For a further explanation of the Department's determination on privatization and these calculations, see the Privatization section of the Final Affirmative Countervailing Duty Determination: Certain Steel Products from Austria, 58 FR 37217, July 9, 1993) (General Issues Appendix). The subsidies allocated to the period of review (POR) for SSAB reflect (where appropriate) the application of the privatization methodology.

Spin-offs

Between 1979 and 1991, SSAB sold to unrelated parties, or contributed to various joint ventures, a number of productive units. In Carbon Steel Flat Products, we stated that a portion of the price paid when a "productive unit" is sold is allocable to the value of subsidies received in prior years by the seller of the "productive unit". In accordance with the spin-off methodology described in the Restructuring section of the General Issues Appendix, we have allocated a portion of SSAB's subsidies to these productive units. Accordingly, we reduced the future subsidy benefit streams of SSAB's long-term loans, grants and equity infusions.

SSAB received subsidies which were tied to specific products. The productive units producing these products were sold by the company prior to the POR. Specifically, SSAB received a grant for an engineering workshop which it no longer owns. It also received specific subsidies for various projects at certain mines which it no longer owns.

With regard to the engineering workshop in Carbon Steel Flat Products, the Department concluded that, although the grant SSAB received was tied to the engineering workshop, the activities of the workshop may have benefitted the subject merchandise. Therefore, that grant was included in calculating SSAB's subsidy. However, when the workshop was sold, we allocated a portion of SSAB's subsidies to the engineering workshop according to the spin-off methodology noted above. The future subsidy benefit streams of SSAB have been adjusted to reflect the sale of this productive unit. See Restructuring section of the General Issues Appendix.

The Department also considers the subsidies SSAB received for mines, which it no longer owns, to be tied to the mines. However, because these mines produced an input product for SSAB's production of the subject merchandise, the subject merchandise benefitted from these subsidies. Therefore, these grants have been included in SSAB's subsidy. However, we have not allocated subsidies to the mines that were sold. Because they were "sold" to the GOS, we do not consider this a legitimate "sale" for purposes of allocating subsidies. Therefore, we have not reduced SSAB's subsidies to reflect a payback of subsidies through the sale of its mines. For identical reasons, we have not adjusted SSAB's subsidies for the sale of the TGOJ railway. See Restructuring section of the General Issues Appendix.

(1) Equity Infusions

SSAB received two equity infusions totaling 1.4 million Swedish Kronor (MSEK) from the GOS in 1978. In 1981, when SSAB required additional equity, the GOS provided 575 MSEK in cash and converted 550 MSEK of SSAB's debt to equity.

In addition, in 1981, Granges AB (Granges), a private company, provided 375 MSEK to SSAB in order to maintain its 25 percent share in SSAB. The GOS agreed to purchase all of Granges' shares in SSAB for 875 MSEK in 1991. In Certain Carbon Steel Products from Sweden; Preliminary Results of Countervailing Duty Administrative Review (53 FR 35883; September 15, 1988) (Carbon Steel Preliminary Results) and in Certain Carbon Steel Products from Sweden; Final Results of Countervailing Duty Administrative Review (54 FR 31716; August 1, 1989) (Carbon Steel Final Results), we determined that the GOS's guarantee of a specified sum to Granges in 1991 in return for its investment in SSAB was an equity infusion. Because we determined that SSAB was unequityworthy in both 1978 and 1981, the equity infusions received in those years were found countervailable. In this review the GOS has provided no new information to warrant a reconsideration of this determination. There have been no additional government equity infusions into SSAB since 1981.

For this review, we preliminarily determine that the most appropriate methodology to use in measuring the benefit from equity infusions made or provided on terms inconsistent with commercial considerations is what we call the "grant" approach. (For a full discussion of this issue, see the Equity section of the General Issues Appendix. We calculated the benefit to SSAB from the equity infusions using our declining balance methodology described in the Department's Proposed Rules (see § 355.49(b)(3) of Countervailing Duties; Notice of Proposed Rulemaking and Request for Public Comments, 54 FR 23366, May 31, 1989) (Proposed Regulations). We have used, as the discount rate, SSAB's company-specific interest rate on fixed-rate long-term loans. On this basis, we preliminarily determine the estimated net subsidy rate from equity infusions during the POR to be 1.56 percent ad valorem.

(2) Government Acquisitions of Assets for SSAB

(A) *TGOJ Railway*—In 1978, Granges transferred assets to SSAB at a negotiated value of 700 MSEK, which was lower than the assets' recorded book value. In Bill 1977/78:87, the GOS proposed that Granges losses be covered by SSAB's payment of 480 MSEK to Granges to acquire its railway operation. SSAB took over Granges railway operation, TGOJ, by paying Granges 343.3 MSEK. The payment was effectuated through a promissory note issued by the GOS to SSAB, which SSAB turned over to Granges so that all payments were made directly from GOS to Granges. We previously determined in the Final Affirmative Countervailing Duty Determination; Certain Carbon Steel Products from Sweden (50 FR 33375; August 19, 1985) (Final Affirmative Carbon Steel Products) that the GOS's payment to Granges conferred a countervailable benefit on SSAB because it relieved SSAB of a debt that the company otherwise would have incurred. In this review the GOS has provided no new information to warrant a reconsideration of this determination.

We calculated the benefit using our declining balance methodology described in the Equity section above. On this basis, we preliminarily determine the estimated net subsidy of the TGOJ grant during the POR to be 0.16 percent *ad valorem*.

(B) *The NJA Grant—In connection with the formation of SSAB in 1978, the GOS provided Norrbottens Jarnverk AB (NJA), a state-owned company, with a 530 MSEK grant. We previously determined that this grant was compensation to NJA for having sold its assets to SSAB below book value (Final Affirmative Carbon Steel Products at 33378). The U.S. Court of International Trade (CIT) upheld the Department's decision (see SSAB Svenskt Stal AB* versus *United States*, 764 F. Supp. 650, 656–57 (CIT 1991)). In this review the GOS has provided no new information to warrant a reconsideration of this determination.

We calculated the benefit using our declining balance methodology described above. We determined in Carbon Steel Flat Products that this grant is directly related to SSAB's production activities. Subsidies tied to productive activities benefit only production of merchandise and do not benefit a company's service functions. Therefore, we subtracted the value of services sold by SSAB from SSAB's total sales when calculating the *ad valorem* benefit for this grant. This is consistent with the methodology outlined in the Denominator section of the General Issues Appendix. On this basis, we preliminarily determine the estimated net subsidy of the NJA grant during the POR to be 0.24 percent *ad valorem*.

(3) Reconstruction Loans

The GOS provided reconstruction loans to SSAB between 1979 and 1985. The initial reconstruction loans were intended to cover expected operating losses during the 1978–1982 restructuring period. Subsequent reconstruction loans were granted for employment promotion and investment in certain plants and equipment. These loans were interest free for three years. Pursuant to the loan terms, half of the principal may be written off after the second calendar year following the disbursement. The remainder of the loan may be forgiven entirely at the end of the ninth calendar year after disbursement. Principal and interest payments on the outstanding loans are required only if SSAB pays dividends to its shareholders. Each year that a dividend is declared, SSAB is obligated to make a payment in an equal amount to the government.

Because these loans were authorized by legislation and were given to SSAB on terms inconsistent with commercial considerations, we previously determined that they were countervailable. (See Final Affirmative Carbon Steel Products).

To calculate the benefit, we treated the portions of the reconstruction loans that were written off through 1991 as grants and used our declining balance methodology described above. On this basis, we preliminarily determine the estimated net subsidy during the POR to be 1.90 percent *ad valorem*.

Only two of SSAB's reconstruction loans showed outstanding balances during the POR. Because of the condition linking repayment of the reconstruction loans to dividends, we have treated these loans as contingent liabilities. Our methodology for calculating the benefit of these loans is similar to the one used for the variable-rate structural loans described in the "Structural Loans" section below. We compared the fixed interest rates charged on these two loans (9.5 and 11.5 percent, respectively) to SSAB's company-specific long-term benchmark interest rates. We found that both loans in question conferred countervailable benefits, because the amount paid by SSAB for those loans was less than what the company would have paid on normal commercial terms. To calculate the benefit of these loans, we calculated the difference between the interest SSAB paid on these loans during the POR with what SSAB would have paid during the POR for a benchmark loan. We divided that difference by SSAB's total sales in the POR, reduced by the value of services sold. This is consistent with the methodology outlined in the Denominator section of the General Issues Appendix. On this basis, we preliminarily determine the net benefit from the outstanding reconstruction loans during the POR to be 0.02 percent *ad valorem*.

(4) Structural Loans

Between 1978 and 1983, SSAB received structural loans from the Swedish government for investments in plant and equipment. One loan was partially converted to equity in 1981. During the POR, portions of three loans were outstanding. The terms of these structural loans were interest-free for three years after disbursement. Thereafter, one loan incurred interest at a fixed rate of 5 percent per annum while the other two loans incurred interest at a variable rate which is recalculated every five years. Pursuant to the loan terms, the variable interest rate on these two loans is set based on the rate of long-term government bonds plus a margin of 0.25 percent. For all structural loans, no principal payments are made in the first five years of the loan. Thereafter, the principal is repaid in 20 equal installments.

In Final Affirmative Carbon Steel Products, we determined that because the structural loans were provided specifically to SSAB, they were limited to a specific enterprise or industry. Therefore, the structural loans are countervailable to the extent that they were provided on terms inconsistent with commercial considerations. To

calculate the benefit from the fixed-rate structural loans, we employed our long-term loan methodology as described in § 355.49(c)(1) of the Department's Proposed Regulations.

To calculate the benefit from the two variable-rate loans, we used our variable-rate long-term loan methodology as described in § 355.49(d)(1) of our Proposed Regulations. We have used, as the discount rate for both the fixed-rate and variable-rate structural loans, SSAB's company-specific interest rate on fixed-rate long-term loans. We calculated the difference between what SSAB paid in interest on these loans during the POR and what SSAB would have paid during the POR, had the loans been provided under normal commercial terms. We then divided the resulting difference for both types of loans by SSAB's total sales in the POR. On this basis, we preliminarily determine the estimated net subsidy of both fixed-rate and variable-rate structural loans during the POR to be 0.37 percent *ad valorem*.

(5) Research and Development (R&D) Grants and Loans

The Swedish National Board for Industrial and Technical Development (NUTEK) provides loans to industries for R&D purposes. If the R&D activities lead to a commercial application with a prospect of economic success, the R&D funds granted become repayable. If the R&D support is forgiven, the company is obliged to make the results generally available. The loans were granted in 1990 and previous years, and accrue interest equal to the official discount rate plus 3.75 percent from the date of disbursement. However, no interest or principal payments are due until the projects are completed. The length of the loans is thus not predetermined, but once a research project is completed, the loans must be repaid within five years.

With respect to the outstanding R&D loans, we cannot determine whether SSAB has received a countervailable benefit until the research is completed. This is because, until then, it is unknown (1) whether the loans will have been forgiven (in which case they are not countervailable because the results are publicly available), and (2) whether the accumulated interest on the loans is lower than it would have been had it been provided on normal commercial terms. (Carbon Steel Flat Products).

Therefore, we will examine any potential benefits from the R&D loans in future administrative reviews of this case. If the R&D loans provide a countervailable benefit to SSAB, it will be captured once SSAB starts repaying the loans. On this basis, we preliminarily determine that there were no net subsidies for R&D loans or grants during the POR.

(6) Special Employment Subsidies

The Swedish Parliament passed Government Bill 1976/77:95 in March 1977 in response to a general economic downturn. The bill provided employment grants to companies recognized as being the dominant employers in a particular community. In order to prevent layoffs, these grants were designed to cover 75 percent of the wages and salaries of surplus workers who performed work at the company unrelated to production activities. These benefits were available to all types of industries throughout Sweden until 1978.

In Carbon Steel Preliminary Results and in Carbon Steel Final Results, we determined that, although grants under Bill 1976/77:95 were *de jure* available to all Swedish industries, the GOS had not provided any information showing the distribution of the benefits. Therefore, we found the grants to be *de facto* specific based on the best information available and, thus, countervailable.

In November 1977, the Swedish Parliament passed Bill 1977/78:59 which extended the benefits for an additional year specifically for the steel industry. Since grants pursuant to Bill 1977/78:59 were only available to the steel industry from July 1978 through June 1979, we determined in Final Affirmative Carbon Steel Products that these grants were countervailable. In this review the GOS has provided no new information or evidence of changed circumstances to warrant a reconsideration of this determination.

In the investigation of Carbon Steel Flat Products, SSAB provided the total amount received under this program in 1978 and 1979, but did not show how much it received in each of those years. In this instant review, SSAB did not provide updated data. Therefore, as a reasonable estimate, we allocated the total amount received in 1978 and 1979 (49.6 MSEK) on the basis of publicly available information provided in SSAB's September 29, 1992 public version of the response to the investigation's questionnaire, a copy of which was transferred into the record of this review. We allocated 17.3 MSEK to 1979, which, SSAB states is the total amount of employment promotion grants received by SSAB in that year, and the remainder, 32.3 MSEK, to 1978. (See Carbon Steel Flat Products (58 FR 37389; July 9, 1993).

We calculated the benefit from the grants received using our declining balance methodology. Because the 1979 grant amounted to less than 0.5 percent of the value of SSAB's total sales in that year, we allocated the amount received in 1979 in the year of receipt. (See Proposed Regulations at § 355.49 (a)(3)(A)). On this basis, we preliminarily determine the estimated net subsidy of the 1978 grant during the POR to be 0.01 percent *ad valorem*.

(7) Grants for Temporary Employment for Public Works

These grants were provided by the GOS to companies and government agencies which temporarily hire unemployed people to perform different types of public works, (e.g., construction, road building). SSAB received such grants between 1979 and 1988. We determined that these grants were countervailable because they were limited to a specific enterprise or industry or group of enterprises or industries. (See Carbon Steel Preliminary Results and Carbon Steel Final Results). The GOS has provided no new information or evidence of changed circumstances to warrant a reconsideration of this determination.

We calculated the benefit from the 1979 grants using our declining balance methodology. The amount received by SSAB under this program in all other years was less than 0.5 percent of the value of the company's total sales in each year. Therefore, we allocated all amounts received from 1980 through 1988 to the year of receipt and there are no benefits during the POR. On this basis, we preliminarily determine the net subsidy of the 1979 grant for temporary employment for public works during the POR to be 0.01 percent *ad valorem*.

(8) Other Programs

We also examined the following programs and preliminarily determined that they were not used by SSAB or only benefitted products other than the subject merchandise during the period of review:

(1) Transportation Grants
(2) Location-of-Industry Grants
(3) State Stockpiling Subsidies
(4) Location-of-Industry Loans
(5) Mining Exploration Grants

Preliminary Results of Review

As a result of our review, we preliminarily determine the net subsidy to be 4.27 percent *ad valorem* for all firms for the period January 1, 1991 through December 31, 1991.

The Department intends to instruct the Customs Service to assess countervailing duties of 4.27 percent of the f.o.b. invoice price on all shipments

of this merchandise exported on or after January 1, 1991 and on or before December 31, 1991.

Further, the Department intends to instruct the Customs Service to collect a cash deposit of estimated countervailing duties, as provided by section 751(a)(1) of the Act, of 4.27 percent of the f.o.b. invoice price on all of SSAB's shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the date of publication of the final results of this administrative review.

Parties to the proceeding may request disclosure of the calculation methodology and interested parties may request a hearing not later than 10 days after the date of publication of this notice. In accordance with 19 CFR 355.38(c)(ii), interested parties may submit written arguments in case briefs on these preliminary results within 30 days of the date of publication. Rebuttal briefs may be submitted seven days after the time limit for filing the case brief. Any hearing, if requested, will be held seven days after the scheduled date for submission or rebuttal briefs. Copies of case briefs and rebuttal briefs must be served on interested parties in accordance with 19 CFR 355.38(e). Any request for disclosure under an administrative protective order must be made no later than five days after the date of publication. The Department will publish the final results of its analysis of issues raised in any such written comment or at a hearing.

This administrative review and notice are in accordance with section 751(a)(1) of the Act (19 U.S.C. 1675(a)(1)) and 19 CFR 355.22.

Dated: November 10, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93–28541 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-DS-P

(C–333–502)

Deformed Steel Concrete Reinforcing Bar From Peru; Intent To Revoke Countervailing Duty Order

AGENCY: International Trade Administration/Import Administration Department of Commerce

ACTION: Notice of intent to revoke countervailing duty order.

SUMMARY: The Department of Commerce is notifying the public of its intent to revoke the countervailing duty order on deformed steel concrete reinforcing bar (rebar) from Peru. Domestic interested parties who object to this revocation must submit their comments in writing not later than thirty days from the publication date of this notice.

EFFECTIVE DATE: November 19, 1993

FOR FURTHER INFORMATION CONTACT: Brian Albright or Kelly Parkhill, Office of Countervailing Compliance, International Trade Administration, U.S. Department of Commerce, Washington, DC 20230; telephone: (202) 482–2305 or 482–2786.

SUPPLEMENTARY INFORMATION:

Background

On November 27, 1985, the Department of Commerce (the Department) published a countervailing duty order on rebar from Peru (50 FR 48819). The Department has not received a request to conduct an administrative review of this countervailing duty order for at least four consecutive annual anniversary months.

In accordance with 19 CFR 355.25(d)(4)(iii), the Secretary of Commerce will conclude that an order is no longer of interest to interested parties and will revoke the order if no domestic interested party objects to revocation or no interested party requests an administrative review by the last day of the fifth anniversary month. Accordingly, as required by § 355.25(d)(4) of the Department's regulations, we are notifying the public of our intent to revoke this order.

Opportunity To Object

Not later than thirty days after the publication date of this notice, domestic interested parties, as defined in § 355.2(i)(3), (i)(4), (i)(5), and (i)(6) of the Department's regulations, may object to the Department's intent to revoke this countervailing duty order.

Seven copies of any such objections should be submitted to the Assistant Secretary for Import Administration, International Trade Administration, room B–099, U.S. Department of Commerce, Washington, DC 20230.

If no interested parties request an administrative review (pursuant to the Department's notice of opportunity to request administrative review), or if no domestic interested parties object to the Department's intent to revoke pursuant to this notice, we shall conclude that the order is no longer of interest to interested parties and shall proceed with the revocation.

This notice is in accordance with 19 CFR 355.25(d)(4)(i).

Roland L. MacDonald,

Acting Deputy Assistant Secretary for Compliance.

[FR Doc. 93–28621 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-DS-P

(C-357-048)

Certain Textiles and Textile Products From Argentina; Intent To Revoke Countervailing Duty Order

AGENCY: International Trade Administration/Import Administration, Department of Commerce.

ACTION: Notice of intent to revoke countervailing duty order.

SUMMARY: The Department of Commerce is notifying the public of its intent to revoke the countervailing duty order on certain textiles and textile products from Argentina, which includes men's and boys' woolen garments. Domestic interested parties who object to this revocation must submit their comments in writing not later than thirty days from the publication date of this notice.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Brian Albright or Kelly Parkhill, Office of Countervailing Compliance, International Trade Administration, U.S. Department of Commerce, Washington, DC 20230; telephone: (202) 482-2305 or 482-2786.

SUPPLEMENTARY INFORMATION:

Background

On November 16, 1978, the Department of Treasury published a countervailing duty order on certain textiles and textile products from Argentina (48 FR 53421). The Department of Commerce (the Department) has not received a request to conduct an administrative review of this countervailing duty order for at least four consecutive annual anniversary months.

In accordance with 19 CFR 355.25(d)(4)(iii), the Secretary of Commerce will conclude that an order is no longer of interest to interested parties and will revoke the order if no domestic interested party objects to revocation or no interested party requests an administrative review by the last day of the fifth anniversary month. Accordingly, as required by § 355.25(d)(4) of the Department's regulations, we are notifying the public of our intent to revoke this order.

Opportunity To Object

Not later than thirty days after the publication date of this notice, domestic interested parties, as defined in § 355.2(i)(3), (i)(4), (i)(5), and (i)(6) of the Department's regulations, may object to the Department's intent to revoke this countervailing duty order.

Seven copies of any such objections should be submitted to the Assistant Secretary for Import Administration, International Trade Administration, room B-099, U.S. Department of Commerce, Washington, DC 20230.

If no interested parties request an administrative review (pursuant to 19 CFR 355.22(a)), or if no domestic interested parties object to the Department's intent to revoke pursuant to this notice, we shall conclude that the order is no longer of interest to interested parties and shall proceed with the revocation.

This notice is in accordance with 19 CFR 355.25(d)(4)(i).

Dated: November 16, 1993.

Roland L. MacDonald,

Acting Deputy Assistant Secretary for Compliance.

[FR Doc. 93–28622 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-DS-P

National Oceanic and Atmospheric Administration

[I.D. 111793C]

Western Pacific Fishery Management Council; Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meeting.

SUMMARY: A special subcommittee of the Western Pacific Fishery Management Council's Scientific and Statistical Committee will hold a meeting on November 22, 1993, from 1 p.m. until 5 p.m. and on November 23, 1993, from 8:00 a.m. until noon, at the NMFS Honolulu Laboratory, 2570 Dole Street, Honolulu, Hawaii.

The Hawaii longline limited entry program proposed under Amendment #7 to the Pelagics Fishery Management Plan would require that the fleet-wide harvesting capacity not exceed that which was allowed during the April 1991–April 1994 moratorium. The subcommittee will discuss and possibly make recommendations regarding alternative methods to:

(1) Measure the maximum harvesting capacity of the longline fleet during the 1991–1994 moratorium;

(2) Regulate the harvesting capacity of longline vessels eligible for participation under the proposed limited entry program; and/or

(3) Propose alternative measures to allow controlled upgrading of longline vessels.

The subcommittee will also discuss results of an economic survey of the Northwestern Hawaiian Islands bottomfish limited entry program, and possibly recommend alternative management options to the Council.

FOR FURTHER INFORMATION CONTACT: Kitty M. Simonds, Executive Director, Western Pacific Fishery Management Council, 1164 Bishop Street, suite 1405, Honolulu, HI 96813; telephone: (808) 523–1368.

Dated: November 17, 1993.

Alfred J. Bilik,

Acting Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 93–28636 Filed 8–18–93; 8:45 am]

BILLING CODE 3510-22-P

[I.D. 110893C]

Northeast Multispecies Fishery; Public Hearings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public hearings and request for comments.

SUMMARY: The New England Fishery Management Council (Council) established by section 302 of the Magnuson Act will hold public hearings to receive comments on the revision of a disapproved section of Amendment 5 to the Northeast Multispecies Fishery Management Plan (FMP). The Council submitted Amendment 5 to the National Marine Fisheries Service (NOAA/NMFS) on September 30, 1993. On October 1, NMFS announced its disapproval of two of the measures contained in that amendment: A 5,000-pound haddock possession limit, and an exception to some of the measures in the amendment for vessels fishing for winter flounder in the waters of those states with a winter flounder management plan approved by the Atlantic States Marine Fisheries Commission (ASMFC). This hearing is to receive comment on a revised winter flounder exception.

DATES: Written comments should be sent by December 7, 1993, to the address below. The hearing will be held at 3:30 p.m. on Wednesday, December 8, 1993, at the King's Grant Inn, Danvers, MA, (Route 128 and Trask Lane, (508) 774–6800).

ADDRESSES: Send written comments to Douglas G. Marshall, Executive Director, New England Fishery Management Council, 5 Broadway, Saugus, MA 01906. Copies of the public hearing document may be obtained from this address. Clearly mark the outside of the envelop "Request for Winter Flounder (Amendment 5) public hearing document".

FOR FURTHER INFORMATION CONTACT: Douglas G. Marshall, Executive Director, (617) 231–0422.

SUPPLEMENTARY INFORMATION: The Regional Director of NMFS disapproved the initial winter flounder measure in Amendment 5 on the grounds that it was poorly defined, insufficiently analyzed, and would likely increase the mortality of winter flounder and other groundfish species. The Council is currently modifying the measure to address those concerns. The Multispecies (Groundfish) Committee will be finalizing those changes at its November 23 meeting in anticipation of this hearing and the December 8–9 Council meeting.

The Council staff will prepare the public hearing document after the Groundfish Committee reviews and approves the measures for the hearing. Interested members of the public should contact the Council office for further information.

The purpose of this notice is to alert the interested public of a public hearing and the opportunity for participation in the development of a fishery management plan amendment in compliance with the Magnuson Fishery Conservation and Management Act. These hearings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Douglas G. Marshall by November 22, 1993 (See **ADDRESSES**).

Authority: 16 U.S.C. 18901 et seq.

Dated: November 16, 1993.

Joe P. Clem,

Acting Director of Office Fisheries, Conservation and Management, National Marine Fisheries Service.

[FR Doc. 93–28489 Filed 11–18–93; 8:45 am]

BILLING CODE 3510-22-M

COMMITTEE FOR THE IMPLEMENTATION OF TEXTILE AGREEMENTS

Adjustment of Import Limits for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in the Dominican Republic

November 12, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs adjusting limits.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Naomi Freeman, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–4212. For information on the quota status of these limits, refer to the Quota Status Reports posted on the bulletin boards of each Customs port or call (202) 927–5850. For information on embargoes and quota re-openings, call (202) 482–3715.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

The current limit for Categories 338/638 is being increased for special shift, reducing the limit for Categories 339/639 to account for the increase.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also see 57 FR 53882, published on November 13, 1992.

The letter to the Commissioner of Customs and the actions taken pursuant to it are not designed to implement all of the provisions of the bilateral agreement, but are designed to assist only in the implementation of certain of its provisions.

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

November 12, 1993.

Commissioner of Customs,
Department of the Treasury, Washington, DC 20229.

Dear Commissioner: This directive amends, but does not cancel, the directive issued to you on November 6, 1992, by the Chairman, Committee for the Implementation of Textile Agreements. That directive concerns imports of certain cotton, wool and man-made fiber textile products, produced or manufactured in the Dominican Republic and exported during the twelve-month period which began on January 1, 1993 and extends through December 31, 1993.

Effective on November 19, 1993, you are directed to adjust the current limits for the following categories, as provided under the terms of the current bilateral agreement between the Governments of the United States and the Dominican Republic:

Category	Adjusted twelve-month limit [1]
338/638	688,057 dozen.
339/639	701,248 dozen.

[1] The limits have not been adjusted to account for any imports exported after December 31, 1992.

The guaranteed access levels for Categories 338/638 and 339/639 remain unchanged.

The Committee for the Implementation of Textile Agreements has determined that these actions fall within the foreign affairs exception to the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–28534 Filed 11–18–93; 8:45 am]

BILLING CODE 3510–DR–F

Rescission of a Request to Consult on Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in El Salvador

November 12, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Notice.

FOR FURTHER INFORMATION CONTACT: Nicole Bivens Collinson, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–4212.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

The United States Government has decided to rescind the request made on July 29, 1993 to consult on imports of cotton and man-made fiber coats in Categories 335/635. Should it become necessary to discuss these categories with the Government of El Salvador at a later date, further notice will be published in the **Federal Register**.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also see 58 FR 42951, published on August 12, 1993.

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–28536 Filed 11–18–93; 8:45 am]

BILLING CODE 3510–DR–F

Amendment of an Import Limit for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in Jamaica

November 12, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs increasing a limit.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Naomi Freeman, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–4212. For information on the quota status of this limit, refer to the Quota Status Reports posted on the bulletin boards of each Customs port or call (202) 927–5850. For information on embargoes and quota re-openings, call (202) 482–3715.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

In a Memorandum of Understanding (MOU) dated November 8, 1993 between the Governments of the United States and Jamaica, agreement was reached, among other things, to increase the 1993 Designated Consultation Level for Categories 331/631.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also see 57 FR 60512, published on December 21, 1992.

The letter to the Commissioner of Customs and the actions taken pursuant to it are not designed to implement all of the provisions of the MOU, but are designed to assist only in the

implementation of certain of its provisions.

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

November 12, 1993.

Commissioner of Customs,
Department of the Treasury, Washington, DC 20229.

Dear Commissioner: This directive amends, but does not cancel, the directive issued to you on December 15, 1992, by the Chairman, Committee for the Implementation of Textile Agreements. That directive concerns imports of certain cotton, wool, man-made fiber and other vegetable fiber textiles and textile products, produced or manufactured in Jamaica and exported during the twelve-month period which began on January 1, 1993 and extends through December 31, 1993.

Effective on November 19, 1993, you are directed, pursuant to a Memorandum of Understanding dated November 8, 1993 between the Governments of the United States and Jamaica, to increase the current limit for Categories 331/631 to 500,000 dozen pairs[1].

The guaranteed access level for Categories 331/631 remains unchanged.

The Committee for the Implementation of Textile Agreements has determined that this action falls within the foreign affairs exception to the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–28537 Filed 11–18–93; 8:45 am]

BILLING CODE 3510–DR–F

Deduction of Import Charges for Certain Wool Textile Products Assembled in the Dominican Republic

November 12, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs deducting charges.

EFFECTIVE DATE: November 19, 1993.

FOR FURTHER INFORMATION CONTACT: Lori E. Goldberg, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–3400.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

[1] The limit has not been adjusted to account for any imports exported after December 31, 1992.

CITA has agreed to issue visa waivers for certain textile products in Category 433 which were cut in the Virgin Islands and assembled in the Dominican Republic and exported to the United States. In the letter published below, the Chairman of CITA directs the Commissioner of Customs to deduct 952 dozen from the import charges made to the current limit for Category 433. Additional deductions will be made at a later date.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992).

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

November 12, 1993.

Commissioner of Customs,
Department of the Treasury, Washington, DC 20229.

Dear Commissioner: To facilitate implementation of the Bilateral Cotton, Wool and Man-Made Fiber Textile Agreement, effected by exchange of notes dated June 11, 1992 and September 23, 1992, between the Governments of the United States and the Dominican Republic, I request that, effective on November 19, 1993, you deduct 952 dozen from the charges made to Category 433 for the period which began on January 1, 1993 and extends through December 31, 1993 (see directive dated November 6, 1992).

This letter will be published in the **Federal Register.**

Sincerely,

Rita D. Hayes,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–28535 Filed 11–18–93; 8:45 am]

BILLING CODE 3510–DR–F

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement List; Proposed Additions and Deletions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Proposed additions to and deletions from procurement list.

SUMMARY: The Committee has received proposals to add to the Procurement List commodities and a service to be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities, and to delete commodities previously furnished by such agencies.

COMMENTS MUST BE RECEIVED ON OR BEFORE: December 20, 1993.

ADDRESSES: Committee for Purchase From People Who Are Blind or Severely Disabled, Crystal Square 3, suite 403, 1735 Jefferson Davis Highway, Arlington, Virginia 22202–3461.

FOR FURTHER INFORMATION CONTACT: Beverly Milkman (703) 603–7740.

SUPPLEMENTARY INFORMATION: This notice is published pursuant to 41 U.S.C. 47(a)(2) and 41 CFR 51–2.3. Its purpose is to provide interested persons an opportunity to submit comments on the possible impact of the proposed actions.

Additions

If the Committee approves the proposed addition, all entities of the Federal Government (except as otherwise indicated) will be required to procure the commodities and service listed below from nonprofit agencies employing persons who are blind or have other severe disabilities.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will furnish the commodities and service to the Government.

2. The action does not appear to have a severe economic impact on current contractors for the commodities and service.

3. The action will result in authorizing small entities to furnish the commodities and service to the Government.

4. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O'Day Act (41 U.S.C. 46–48c) in connection with the commodities and service proposed for addition to the Procurement List.

Comments on this certification are invited. Commenters should identify the statement(s) underlying the certification on which they are providing additional information.

It is proposed to add the following commodities and service to the Procurement List for production by the nonprofit agency listed:

Commodities

Floss, Dental
6520–00–935–1007

6520–01–063–7477
6520–01–063–7478
6520–01–063–6875
Nonprofit Agency: J. M. Murray Center, Inc., Cortland, New York

Dispenser, Tape
7520–00–240–2411
Nonprofit Agency: Development Workshop, Inc., Idaho Falls, Idaho

Service

Janitorial/Custodial, Riverside National Nursery, 22495 Van Buren Boulevard, Riverside, California
Nonprofit Agency: Association for Retarded Citizens—Riverside, Inc., Riverside, California

Deletions

It is proposed to delete the following commodities from the Procurement List:

Commodities

Cushion Assembly, Seat Back
2540–01–065–6288

Cushion, Seat, Vehicular
2540–01–074–6363

Cushion, Seat Back, Vehicular
2540–01–065–6289
2540–00–880–3925

Beverly L. Milkman,

Executive Director.

[FR Doc. 93–28514 Filed 11–18–93; 8:45 am]

BILLING CODE 8820–33–P

Procurement List; Additions

AGENCY: Committee for Purchase from People Who Are Blind or Severely Disabled.

ACTION: Additions to procurement list

SUMMARY: This action adds to the Procurement List commodities and a service to be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities.

EFFECTIVE DATE: December 20, 1993.

ADDRESSES: Committee for Purchase from People Who Are Blind or Severely Disabled, Crystal Square 3, suite 403, 1735 Jefferson Davis Highway, Arlington, Virginia 22202–3461.

FOR FURTHER INFORMATION CONTACT: Beverly Milkman, (703) 603–7740.

SUPPLEMENTARY INFORMATION: On August 6 and October 1, 1993, the Committee for Purchase from People Who Are Blind or Severely Disabled published notices (58 FR 42055 and 51319) of proposed additions to the Procurement List.

After consideration of the material presented to it concerning capability of qualified nonprofit agencies to provide the commodities and service, fair market price, and impact of the additions on the current or most recent contractors, the Committee has determined that the commodities and service listed below are suitable for procurement by the Federal Government under 41 U.S.C. 46–48c and 41 CFR 51–2.4.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will furnish the commodities and service to the Government.

2. The action will not have a severe economic impact on current contractors for the commodities and service.

3. The action will result in authorizing small entities to furnish the commodities and service to the Government.

4. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O'Day Act (41 U.S.C. 46 - 48c) in connection with the commodities and service proposed for addition to the Procurement List. Accordingly, the following commodities and service are hereby added to the Procurement List:

Commodities

Sponge, Chamber Swabbing
1025–01–232–6822

Chair, Rotary, Drafting
7110–00–194–1611
7110–00–281–4469

Planner, Executive Day
7530P902477F
(Requirements for Hill Air Force Base, Utah)

Filler, Executive Day Planner
7530P902476F
(Requirements for Hill Air Force Base, Utah)

Ruff, Parka
8415–01–315–9765 thru –9769

Services

Janitorial/Custodial, Utah Test and Training Range (OASIS), Lakeside, Utah

This action does not affect current contracts awarded prior to the effective date of this addition or options exercised under those contracts.

Beverly L. Milkman,

Executive Director.

[FR Doc. 93–28513 Filed 11–18–93; 8:45 am]

BILLING CODE 6820–33–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board Task Force on Antitrust Aspects of Defense Industry Consolidation

ACTION: Notice of advisory committee meeting.

SUMMARY: The Defense Science Board Task Force on Antitrust Aspects of Defense Industry Consolidation will meet in open session on November 30, 1993 at the Pentagon, room 1E801, and on December 1, 1993 at the Pentagon, room 3E869, Arlington, Virginia.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition on scientific and technical matters as they affect the perceived needs of the Department of Defense.

Persons interested in further information should call Ms. Amy Jeffress at (703) 697–9247.

Dated: November 15, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–28440 Filed 11–18–93; 8:45 am]

BILLING CODE 5000–04–M

Defense Science Board Task Force on Acquiring Defense Software Commercially

ACTION: Notice of advisory committee meeting.

SUMMARY: The Defense Science Board Task Force on Acquiring Defense Software Commercially will meet in open session on December 16–17, 1993 at Strategic Analysis, Inc., Arlington, Virginia.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition on scientific and technical matters as they affect the perceived needs of the Department of Defense. At this meeting, the Task Force will review current DoD software acquisition regulations, DoD acquisition experiences with selected software-intensive systems, and contractor acquisition experiences with DoD and commercial software-intensive systems.

Persons interested in further information should call Ms. Virginia Castor at (703) 614–0212.

Dated: November 15, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–28441 Filed 11–18–93; 8:45 am]

BILLING CODE 5000–04–M

Department of Defense Wage Committee; Closed Meetings

Pursuant to the provisions of section 10 of Public Law 92–463, the Federal Advisory Committee Act, notice is hereby given that a meeting of the Department of Defense Wage Committee will be held on Tuesday, December 7, 1993; Tuesday, December 14, 1993; Tuesday, December 21, 1993; and Tuesday, December 28, 1993, at 2 p.m. in room 800, Hoffman Building #1, Alexandria, Virginia.

The Committee's primary responsibility is to consider and submit recommendations to the Assistant Secretary of Defense (Personnel and Readiness) concerning all matters involved in the development and authorization of wage schedules for federal prevailing rate employees pursuant to Public Law 92–392. At this meeting, the Committee will consider wage survey specifications, wage survey data, local wage survey committee reports and recommendations, and wage schedules derived therefrom.

Under the provisions of section 10(d) of Public Law 92–463, meetings may be closed to the public when they are "concerned with matters listed in 5 U.S.C. 552b." Two of the matters so listed are those "related solely to the internal personnel rules and practices of an agency," (5 U.S.C. 552b. (c)(2)), and those involving "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (5 U.S.C. 552b. (c)(4)).

Accordingly, the Deputy Assistant Secretary of Defense (Civilian Personnel Policy/Equal Opportunity) hereby determines that all portions of the meeting will be closed to the public because the matters considered are related to the internal rules and practices of the Department of Defense (5 U.S.C. 552b(c)(2)), and the detailed wage data considered were obtained from officials of private establishments with a guarantee that the data will be held in confidence (5 U.S.C. 552b(c)(4)).

However, members of the public who may wish to do so are invited to submit material in writing to the chairman concerning matters believed to be deserving of the Committee's attention.

Additional information concerning this meeting may be obtained by writing the Chairman, Department of Defense Wage Committee, room 3D264, The Pentagon, Washington, DC 20310.

Dated: November 15, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–28439 Filed 11–18–93; 8:45 am]

BILLING CODE 5000–04–M

Department of the Army

Army Science Board; Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), announcement is made of the following Committee Meeting:

Name of committee: Army Science Board (ASB).

Date of Meeting: 7 & 8 December 1993.

Time of meeting: 0900–1700, 7 December 1993, 0900–1200, 8 December 1993.

Place: Fort Knox, Kentucky.

Agenda: The Army Science Board's Subgroup on "Battle Labs Program" will meet to observe the Third Wave Battle Command Advanced Warfighting Demonstration and discuss the activities of the Mounted Battle Space Battle Lab. Any interested person may attend, appear before, or file statements with the committee at the time and in the manner permitted by the committee. The ASB Administrative Officer, Sally Warner, may be contacted for further information (703) 695–0781.

Sally A. Warner,

Administrative Officer, Army Science Board.

[FR Doc. 93–28446 Filed 11–18–93; 8:45 am]

BILLING CODE 3710–08–M

Defense Logistics Agency

Privacy Act of 1974: Computer Matching Program Between the Social Security Administration and the Department of Defense

AGENCY: Defense Manpower Data Center, Defense Logistics Agency, Department of Defense (DoD).

ACTION: Notice of a computer matching program between the Social Security Administration (SSA) and the Department of Defense (DoD) for public comment.

SUMMARY: Subsection (e)(12) of the Privacy Act, 5 U.S.C. 552a, requires agencies to publish advance notice of any proposed or revised computer matching program by the matching agency for public comment. The DoD, as the matching agency under the Privacy Act, is (1) hereby giving indirect or constructive notice in lieu of direct notice to the record subjects of this computer matching program between the SSA and DoD that their records are being matched to validate an applicant's initial eligibility for, or recipients receiving, Supplemental Security Income (SSI) benefits from the SSA; and (2) announcing to the public the opportunity to comment on the proposed computer matching program.

DATES: This proposed action is effective on November 20, 1993, when the computer matching agreement will become effective and matching will proceed accordingly without further notice, unless comments are received which would result in a contrary determination or if the Office of Management and Budget or Congress objects thereto. Any public comments must be received before the effective date.

ADDRESSES: Please submit written comments to the Director, Defense Privacy Office, 1941 Jefferson Davis Highway, Room 920, Arlington, VA 22202–4502. Telephone (703) 607–2943 or Autovon 327–2943.

SUPPLEMENTARY INFORMATION: Pursuant to subsection (o) of the Privacy Act of 1974, as amended, 5 U.S.C. 552a, the DoD and the SSA has concluded an agreement to conduct a computer matching program between the agencies. The purpose of the computer match is to verify the information furnished to the SSA by applicants and recipients of social security supplemental income benefits who are retired military members or their survivors. By law, the SSA must independently verify the information submitted by applicants and recipients. Computer matching appeared to be the most efficient and economical manner in which this verification process could be accomplished while preserving the due process of the individual concerned. Therefore, it was concluded and agreed upon that computer matching would be the best and least obtrusive manner and choice for accomplishing this requirement.

A copy of the computer matching agreement between the SSA and the DoD is available upon request to the public. Requests should be submitted to the address above or to the Chief, Payment Quality Branch, Office of Supplemental Security Income, 3–J–1 Operations Building, 6401 Security Boulevard, Woodlawn, MD 21235.

Set forth below is a notice of the establishment of a computer matching program required by paragraph 6.c. of the Office of Management and Budget Guidelines on Computer Matching published in the **Federal Register** at 54 FR 25818 on June 19, 1989.

The matching agreement as required by 5 U.S.C. 552a(r) of the Privacy Act,

was submitted on November 5, 1993, to the Committee on Government Operations of the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, pursuant to paragraph 4d of Appendix I to OMB Circular No. A–130, 'Federal Agency Responsibilities for Maintaining Records about Individuals,' dated June 25, 1993 (58 FR 36075, July 2, 1993). The matching program is subject to review by OMB and Congress and shall not become effective until that review period has elapsed.

Dated: November 12, 1993.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

COMPUTER MATCHING PROGRAM BETWEEN THE DEPARTMENT OF DEFENSE AND THE SOCIAL SECURITY ADMINISTRATION FOR VERIFICATION OF ELIGIBILITY FOR SUPPLEMENTAL SECURITY INCOME

A. *PARTICIPATING AGENCIES:* Participants in this computer matching are the Social Security Administration (SSA) of the Department of Health and Human Services (HHS) and the Defense Manpower Data Center (DMDC) of the Department of Defense (DoD). The SSA is the source agency, i.e., the agency disclosing the records for the purpose of the match. The DMDC is the specific recipient agency or matching agency, i.e., the agency that actually performs the computer matching.

B. *PURPOSE OF THE MATCH:* The purpose of this computer matching program is to verify the information provided to the SSA by applicants and recipients, who are retired military members or their survivors, for Supplemental Security Income (SSI) benefits. By law, the SSA must verify the eligibility information provided by these personnel by independent means and make final determinations as to eligibility of individual applicants or recipients for particular benefits, specific amounts, and any adjustments or recovery thereof for this Federal benefit program. If this operation was not automated, and full reliance were placed solely on manual actions, the costs would be prohibitive. Furthermore, in a fully manual operation, the data could very easily be outdated by the time it was processed.

C. *AUTHORITY FOR CONDUCTING THE MATCH:* The legal authority for the matching program is contained in 42 U.S.C. 1383(e)(1)(B) which requires SSA to verify eligibility factors and other relevant information provided by the SSI applicant from independent or collateral sources and obtain additional information, as necessary, before making SSI determinations of eligibility or payment amount. 42 U.S.C. 1383(f) states that the head of any Federal agency shall provide such information as the Secretary of Health and Human Services needs for purposes of determining eligibility for or amount of benefits, or verifying other information with respect thereto.

D. *RECORDS TO BE MATCHED:* The systems of records maintained by the respective agencies under the Privacy Act, from which records will be disclosed for the proposed computer match are as follows: The Social Security Administration, HHS, will use records from a system identified as 09–60–0103, entitled 'Supplemental Security Income Record, (SSR), HHS/SSA/OSR', last published in the **Federal Register** at 58 FR 35034 on June 30, 1993. The category of records to be used from this system is the SSI eligibility file. DMDC (DoD) will use a record system from the Defense Logistics Agency identified as S322.10 DMDC entitled 'Defense Manpower Data Center Data Base', published in the **Federal Register** at 58 FR 10872 on February 22, 1993. The categories of records utilized are military retirees and/or their survivors. The specific data elements to be used in the match are set forth below under the description of the computer matching program. Both systems of records respectively contain an appropriate routine use disclosure provision permitting the interchange of the affected personal information between SSA and DMDC. These routine uses are compatible with the purpose for collecting the information and establishing and maintaining the record system.

E. *DESCRIPTION OF COMPUTER MATCHING PROGRAM:* A magnetic computer tape (query file), provided by SSA as the source, will contain approximately 5 million records extracted form the Supplemental Security Income Record system of records which is made up of individual record subjects containing the name, social security number and type of beneficiary. The tape will be matched by DMDC, as the recipient matching agency, and matched against the data base category of individuals who are military retirees (Army, Navy, Air Force and Marine Corps) or their survivors. DMDC will match on the social security number and provide the SSA on a reply tape file the following data elements on a match (hit): Name, date of birth, address, payments status, monthly pension amount, date of entitlement, date of any payments stopped and reason. It is estimated that the reply tape file will contain approximately 5,000 records. SSA will be responsible for verifying and determining if the data of the DMDC reply file are consistent with the data of the SSA query file and to resolve any discrepancies or inconsistencies on an individual basis.

F. *PROVIDING DUE PROCESS TO INDIVIDUALS:* Record subjects of the match will be afforded due process procedures.

1. SSA will determine if the data on the DMDC reply file are consistent with the data on the SSA query finder file and resolve any discrepancies or inconsistencies on an individual basis. If the data are not consistent, SSA will contact the individual to confirm the data on the DMDC file.

2. Before taking any adverse action based on the information received from the match, SSA agrees to provide written notice with specific details to each individual for whom SSA decides possible adverse action may be necessary. SSA will inform the individual:

a. That SSA has received information pertaining to receipt of an annuity payment which indicates that an adverse action may be necessary with a description of the conflicting or adverse information.

b. That the individual has 30 days in which to contest and respond to the adverse information.

c. That, unless the individual notifies SSA that the information is not accurate within 30 days from the date of the notice, SSA will conclude that the data provided by DMDC is correct and will make the necessary adjustment to the individual's SSI payment.

d. That failure to respond to the notification will be construed as verification of the data provided by DMDC thereby justifying taking adverse action.

3. After independent verification and notice under subsection (p) of the Privacy Act, SSA will make all determinations as to eligibility of individual applicants for or recipients of particular benefits, specific amounts, and any adjustments or recovery of payments thereof.

G. *INCLUSIVE DATES OF THE MATCHING PROGRAM:* This computer matching program is subject to review by the Office of Management and Budget and Congress. If no objections are raised by either, and the mandatory 30 day public notice period for

comment has expired for this Federal Register notice with no significant adverse public comments in receipt resulting in a contrary determination, then this computer matching program becomes effective and the respective agencies may begin the exchange of data 30 days after the date of this published notice at a mutually agreeable time and will be repeated on an annual basis. Under no circumstances shall the matching program be implemented before the 30 day public notice period for comment has elapsed as this time period cannot be waived. By agreement between SSA and DMDC, the matching program will be in effect and continue for 18 months with an option to extend it for 12 additional months.

H. *ADDRESS FOR RECEIPT OF PUBLIC COMMENTS OR INQUIRIES:* Director, Defense Privacy Office, 1941 Jefferson Davis Highway, Room 920, Arlington, VA 22202–4502. Telephone (703) 607–2943.

[FR Doc. 93–28443 Filed 11–18–93; 8:45 am]

BILLING CODE [illegible]

Privacy Act of 1974; Computer Matching Program Between the Office of Personnel Management and the Department of Defense

AGENCY: Defense Manpower Data Center, Defense Logistics Agency, Department of Defense.

ACTION: Notice of a new computer matching program between the Office of Personnel Management (OPM) and the Department of Defense (DoD) for public comment.

SUMMARY: Subsection (e)(12) of the Privacy Act of 1974, as amended, (5 U.S.C. 552a), requires agencies to publish advance notice of any proposed or revised computer matching program by the matching agency for public comment. The DoD, as the matching agency under the Privacy Act, is hereby giving constructive notice in lieu of direct notice to the record subjects of a computer matching program between OPM and DoD that their records are being matched by computer. The objective is to locate OPM delinquent debtors who are current or former Federal employees or military members receiving Federal salary or benefit payments and indebted and delinquent in their repayment of debts owed to the United States Government under certain programs administered by OPM. The match will permit OPM to pursue and collect the debt by voluntary repayment or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

DATES: This proposed action will become effective December 20, 1993, and the computer matching will proceed accordingly without further notice, unless comments are received which would result in a contrary determination or if the Office of Management and Budget or Congress objects thereto. Any public comment must be received before the effective date.

ADDRESSES: Any interested party may submit written comments to the Director, Defense Privacy Office, Crystal Mall 4, Room 920, 1941 Jefferson Davis Highway, Arlington, VA 22202–4502. Telephone (703) 607–2943.

SUPPLEMENTARY INFORMATION: Pursuant to subsection (o) of the Privacy Act of 1974, as amended, (5 U.S.C. 552a), the OPM and DoD has concluded an agreement to conduct a computer matching program between the agencies. The purpose of the match is to exchange personal data between the agencies for debt collection from defaulters of obligations owed to the U.S. Government held by OPM. The match will yield the identity and location of those debtors within the Federal government so that OPM can pursue recoupment of the debt by voluntary payment or by administrative or salary offset procedures under the Debt Collection Act of 1982. Computer matching appeared to be the most efficient and effective manner to accomplish this task with the least amount of intrusion of personal privacy of the individuals concerned. It was therefore concluded and agreed upon that computer matching would be the best and least obtrusive manner and choice for accomplishing this requirement.

A copy of the computer matching agreement between OPM and DoD is available upon request to the public. Requests should be submitted to the address caption above or to the Quality Assurance Division, Retirement and Insurance Group, 1900 E Street, NW, Washington, DC 20415.

Set forth below is the notice of the establishment of a computer matching program required by paragraph 6.c. of the Office of Management and Budget Guidelines on computer matching published in the **Federal Register** at 54 FR 25818 on June 19, 1989.

The matching agreement, as required by 5 U.S.C. 552a(r) of the Privacy Act, and an advance copy of this notice was submitted on November 5, 1993, to the Committee on Government Operations of the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget pursuant to paragraph 4d of Appendix I to OMB Circular No. A–130, "Federal Agency Responsibilities for Maintaining Records about Individuals," dated June 25, 1993 (58 FR 36075, July 2, 1993). The matching program is subject to review by OMB and Congress and shall not become effective until that review period has elapsed.

Dated: November 12, 1993.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

COMPUTER MATCHING PROGRAM BETWEEN THE OFFICE OF PERSONNEL MANAGEMENT AND THE DEPARTMENT OF DEFENSE FOR DEBT COLLECTION

A. *PARTICIPATING AGENCIES:* Participants in this computer matching program are the Quality Assurance Division, Retirement and Insurance Group, Office of Personnel Management (OPM) and the Defense Manpower Data Center (DMDC) of the Department of Defense (DoD). The OPM is the source agency, i.e., the agency disclosing the records for the purpose of the match. The DMDC is the specific recipient agency or matching agency, i.e., the agency that actually performs the computer matching.

B. *PURPOSE OF THE MATCH:* The purpose of the match is to identify and locate OPM delinquent debtors who are current or former Federal employees or military members receiving any Federal salary or benefit payments that are indebted and delinquent in their repayment of debts to the United States Government under certain programs administered by OPM so as to permit OPM to pursue and collect the debt by voluntary repayments or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

C. *AUTHORITY FOR CONDUCTING THE MATCH:* The legal authority for conducting the matching program is contained in the Debt Collection Act of 1982 (Pub. L. 97–365), 31 U.S.C. Chapter 37, Subchapter I (General) and Subchapter II (Claims of the United States Government), 31 U.S.C. 3711 Collection and Compromise, 31 U.S.C. 3716 Administrative Offset, 5 U.S.C. 5514 Installment deduction for indebtedness (salary offset); 10 U.S.C. 136, Assistant Secretaries of Defense, appointment powers and duties; Section 206 of Executive Order 11222; 4 CFR

Chapter II, Federal Claims Collection Standards (General Accounting Office - Department of Justice); 5 CFR 550.1101 – 550.1108 Collection by Offset from Indebted Government Employees (OPM); 5 CFR part 831, subparts M and N and 5 CFR part 845, subparts B and C, as applicable.

D. *RECORDS TO BE MATCHED:* The systems of records maintained by the respective agencies under the Privacy Act of 1974, as amended, 5 U.S.C. 552a, from which records will be disclosed for the purpose of this computer match are as follows:

1. OPM will use the record system identified as OPM/CENTRAL–1, Civil Service Retirement and Insurance Records, last published in the **Federal Register** at 58 FR 19154 on April 12, 1993, and revised at 58 FR 41300 on August 3, 1993.

2. DoD will use the record system identified as S322.11 DMDC, entitled "Federal Creditor Agency Debt Collection Data Base," last published in the **Federal Register** at 58 FR 10875 on February 22, 1993.

The categories of records in the OPM and DoD records are personnel employment records. The categories of individuals in the OPM system consists of active, separated and retired civilian employees. The DMDC database, established under an interagency agreement between DoD, OPM, OMB, and the Department of the Treasury, consists of employment records of Federal employees and military members, active, and retired. Both record systems involved contain an appropriate routine use disclosure provision required by the Privacy Act permitting the interchange of the affected personal information between OPM and DoD. These routine uses are compatible with the purpose for collecting the information and establishing and maintaining the record systems.

E. *DESCRIPTION OF COMPUTER MATCHING PROGRAM:* OPM, as the source, will provide DMDC with a magnetic tape of delinquent debtors in programs the OPM administers. The tape will contain data elements of name and SSN on approximately 7 thousand individual debtors. Upon receipt of the computer tape file of debtor accounts, DMDC as the recipient matching agency, will perform a computer match using all nine digits of the SSN of the OPM file against the DMDC computer data base that contains information on approximately 10 million individuals. Matching records, "hits" based on the SSN, will produce the member's name, service or agency, category of employee, salary or benefit amounts, and current work or home address. The hits will be furnished to OPM. OPM will be responsible for verifying and determining if the data of the DMDC reply tape file are consistent with OPM's source file and to resolve any discrepancies or inconsistencies on an individual basis. OPM will also be responsible for making final determinations as to positive identification, amount of indebtedness and recovery efforts as a result of the match. OPM expects to recover 6.64 million dollars out of the 41.5 million dollars owed. This is based on a 16 percent recovery rate probability.

F. *INCLUSIVE DATES OF THE MATCHING PROGRAM:* This computer matching program is subject to review by the Office of Management and Budget and Congress. If no objections are raised by either, and the mandatory 30 day public notice period for comment has expired for this **Federal Register** notice with no significant adverse public comments in receipt resulting in a contrary determination, then this computer matching program becomes effective and the respective agencies may begin the exchange of data 30 days after the date of this published notice at a mutually agreeable time and will be repeated on an annual basis, unless OMB or the Treasury Department request a match twice a year. Under no circumstances shall the matching program be implemented before this 30 day public notice period for comment has elapsed as this time period cannot be waived. By agreement between OPM and DoD, the matching program will be in effect and continue for 18 months with an option to extend for 12 additional months unless one of the parties to the agreement advises the other by written request to terminate or modify the agreement.

G. *ADDRESS FOR RECEIPT OF PUBLIC COMMENTS OR INQUIRIES:* Director, Defense Privacy Office, Crystal Mall 4, Room 920, 1941 Jefferson Davis Highway, Arlington, VA 22202–4502. Telephone (703) 607–2943.

[FR Doc. 93–28442 Filed 11–18–93; 8:45 am]
BILLING CODE 5000–04–F

Privacy Act of 1974; New Computer Matching Program Between the Department of Education and the Defense Manpower Data Center of the Department of Defense

AGENCY: Defense Manpower Data Center, Defense Logistics Agency, Department of Defense.

ACTION: Notice of a new computer matching program between the Department of Education (ED) and the Department of Defense (DoD) for public comment.

SUMMARY: Subsection (e)(12) of the Privacy Act of 1974, as amended, (5 U.S.C. 552a) requires agencies to publish advance notice of any proposed or revised computer matching program by the matching agency for public comment. The DoD, as the matching agency under the Privacy Act is hereby giving constructive notice in lieu of direct notice to the record subjects of a computer matching program between ED and DoD that their records are being matched by computer. The record subjects are ED delinquent debtors who may be current or former Federal employees or military members receiving Federal salary or benefit payments and indebted and delinquent in their repayment of debts owed to the United States Government under certain programs administered by ED so as to permit ED to pursue and collect the debt by voluntary repayment or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

DATES: This proposed action will become effective November 20, 1993, and the computer matching will proceed accordingly without further notice, unless comments are received which would result in a contrary determination or if the Office of Management and Budget or Congress objects thereto. Any public comment must be received before the effective date.

ADDRESSES: Any interested party may submit written comments to the Director, Defense Privacy Office, Crystal Mall 4, Room 920, 1941 Jefferson Davis Highway, Arlington, VA 22202–4502. Telephone (703) 607–2943.

SUPPLEMENTARY INFORMATION: Pursuant to subsection (o) of the Privacy Act of 1974, as amended, (5 U.S.C. 552a), the DoD and ED has concluded an agreement to conduct a computer matching program between the agencies. The purpose of the match is to exchange personal data between the agencies for debt collection from defaulters of student loan obligations held by ED under the Debt Collection Act of 1982. The match will yield the identity and location of the debtors within the Federal government so that ED can pursue recoupment of the debt by voluntary payment or by administrative or salary offset procedures. Computer matching appeared to be the most efficient and effective manner to

accomplish this task with the least amount of intrusion of personal privacy of the individuals concerned. It was therefore concluded and agreed upon that computer matching would be the best and least obtrusive manner and choice for accomplishing this requirement.

A copy of the computer matching agreement between ED and DoD is available upon request to the public. Requests should be submitted to the address caption above or to the Debt Collection and Management Assistance Service (DCMAS), Room 5118, ROB–3, Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202–5320.

Set forth below is the notice of the establishment of a computer matching program required by paragraph 6.c. of the Office of Management and Budget Guidelines on computer matching published in the **Federal Register** at 54 FR 25818 on June 19, 1989.

The matching agreement, as required by 5 U.S.C. 552a(r) of the Privacy Act, and an advance copy of this notice was submitted on November 8, 1993, to the Committee on Government Operations of the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget pursuant to paragraph 4d of Appendix I to OMB Circular No. A–130, 'Federal Agency Responsibilities for Maintaining Records about Individuals,' dated June 25, 1993 (58 FR 36075, July 2, 1993). The matching program is subject to review by OMB and Congress and shall not become effective until that review period has elapsed.

Dated: November 15, 1993.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

NOTICE OF A COMPUTER MATCHING PROGRAM BETWEEN THE DEPARTMENT OF EDUCATION AND THE DEPARTMENT OF DEFENSE FOR DEBT COLLECTION

A. *PARTICIPATING AGENCIES:* Participants in this computer matching program are the Debt Collection Service (DCS), Department of Education (ED) and the Defense Manpower Data Center (DMDC) of the Department of Defense (DoD). The DCS is the source agency, i.e., the activity disclosing the records for the purpose of the match. The DMDC is the specific recipient activity or matching agency, i.e., the agency that actually performs the computer matching.

B. *PURPOSE OF THE MATCH:* The purpose of the match is to identify and locate ED delinquent debtors who are current or former Federal employees or military members receiving any Federal salary or benefit payments that are indebted and delinquent in their repayment of debts to the United States Government under certain programs administered by ED so as to permit ED to pursue and collect the debt by voluntary repayments or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

C. *AUTHORITY FOR CONDUCTING THE MATCH:* The legal authority for conducting the matching program is contained in the Debt Collection Act of 1982 (Pub. L. 97–365), 31 U.S.C. Chapter 37, Subchapter I (General) and Subchapter II (Claims of the United States Government), 31 U.S.C. 3711 Collection and Compromise, 31 U.S.C. 3716 Administrative Offset, 5 U.S.C. 5514 Installment deduction for indebtedness (salary offset); 10 U.S.C. 136, Assistant Secretaries of Defense, appointment powers and duties; section 206 of Executive Order 11222; 4 CFR Chapter II, Federal Claims Collection Standards (General Accounting Office - Department of Justice); 5 CFR 550.1101 – 550.1108 Collection by Offset from Indebted Government Employees (OPM); 34 CFR Part 30 - Debt Collection and Part 31 - Salary Offset for Federal Employees who are indebted to the United States Under Programs Administered by the Secretary of Education.

D. *RECORDS TO BE MATCHED:* The systems of records maintained by the respective agencies under the Privacy Act of 1974, as amended, 5 U.S.C. 552a, from which records will be disclosed for the purpose of this computer match are as follows: ED will use records from two systems of records. Record system identified as 18–40–0025, entitled 'NDSL Student Loan Files-ED/OPE/OSFA,' last published in the **Federal Register** at 47 FR 27884 on June 28, 1982, and record system identified as 18–40–0026, entitled 'Guaranteed Loan Program-Paid Claims File ED/OPE/OSFA,' last published in the **Federal Register** at 47 FR 27885 on June 28, 1982. These record systems will be matched against the DoD record system identified as S322.11 DMDC, entitled 'Federal Creditor Agency Debt Collection Data Base,' last published in the **Federal Register** at 58 FR 10875 on February 22, 1993. The categories of records in the ED systems are student loan defaulters. The categories of records in the DoD system consists of active and retired military members, including the reserve, and the OPM government-wide Federal active and retired civilian records. All the record systems involved contain an appropriate routine use disclosure provision required by the Privacy Act permitting the interchange of the affected personal information between ED and DoD. These routine uses are compatible with the purpose for collecting the information and establishing and maintaining the record systems.

E. *DESCRIPTION OF COMPUTER MATCHING PROGRAM:* DCS, as the source, will provide DMDC with a magnetic tape of individuals delinquent in repayment of ED student loans. The tape will contain data elements of name and SSN on approximately 3 million individual debtors. Upon receipt of the computer tape file of debtor accounts, DMDC as the recipient matching agency, will perform a computer match using all nine digits of the SSN of the ED file against a DMDC computer data base. The DMDC computer data base, established under an interagency agreement between DoD, OPM, OMB and the Treasury Department, consists of employment records of approximately 10 million Federal employees and military members, active and retired. Matching records, 'hits' based on the SSN, will produce the member's name, service or agency, category of employee, salary or benefit amounts, and current work or home address. The hits will be furnished to DCS. DCS will be responsible for verifying and determining if the data of the DMDC reply tape file are consistent with DCS's source file and to resolve any discrepancies or inconsistencies on an individual basis. DCS will also be responsible for making final determinations as to positive identification, amount of indebtedness and recovery efforts as a result of the match. DCS expects to obtain current address information on approximately 40,000 Federal employees/retirees or military members having student loan obligations held by ED.

F. *INCLUSIVE DATES OF THE MATCHING PROGRAM:* This computer matching program is subject to review by the Office of Management and Budget and Congress. If no objections are raised by either, and the mandatory 30 day public notice period for comment has expired for this **Federal Register** notice with no significant adverse public comments in receipt resulting in a contrary determination, then this computer matching program becomes effective and the respective agencies may begin the exchange of data

30 days after the date of this published notice at a mutually agreeable time and will be repeated on a six month basis. Under no circumstances shall the matching program be implemented before the 30 day public notice period for comment has elapsed as this time period cannot be waived. By agreement between ED and DoD, the matching program will be in effect and continue for 18 months with an option to renew for 12 additional months unless one of the parties to the agreement advises the other by written request to terminate or modify the agreement.

G. *ADDRESS FOR RECEIPT OF PUBLIC COMMENTS OR INQUIRIES:* Director, Defense Privacy Office, Crystal Mall 4, Room 920, 1941 Jefferson Davis Highway, Arlington, VA 22202–4502. Telephone (703) 607–2943.

[FR Doc. 93–28444 Filed 11–18–93; 8:45 am]

BILLING CODE 5005-36-F

Department of the Navy

Intent To Prepare an Environmental Impact Statement for Establishing the U.S. Navy Mine Warfare Center of Excellence; Corpus Christi/Ingleside Naval Complex, Corpus Christi, TX

Pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969, as implemented by the Council on Environmental Quality regulations (40 CFR parts 1500–1508), the Department of the Navy announces its intent to prepare an Environmental Impact Statement (EIS) to evaluate the environmental effects of establishing and operating a Mine Warfare Center of Excellence (Center) at the Corpus Christi/Ingleside Naval Complex, Corpus Christi, Texas.

The Navy proposes to develop the Center by collocating its mine warfare assets in proximity to each other. This will allow for comprehensive air and surface mine warfare training. The concept of the Center was first raised in 1989 by Secretary of the Navy Lawrence Garrett. More recently, as a result of several deployments against actual mine threats, the need for a comprehensive training regimen which includes all phases of mine warfare activities working together was emphasized. The Navy proposed to develop the Center at the Corpus Christi/Ingleside Naval Complex, Texas.

Actions to be addressed in the EIS include both new construction and general operations and training. Proposed actions include: Construction of a Magnetic Silencing Facility (ship degaussing and deperming facilities), construction of an Aviation Mine Counter Measure sled ramp, designation of Mine Warfare Training and Operating Areas (including beach and offshore training areas), and construction of a small craft pier. Also to be included in the EIS are those construction projects necessary to support mine sweeping helicopter squadrons at Naval Air Station Corpus Christi as well as construction of facilities at Naval Station Ingleside.

The objective of the EIS is the collection, analysis and presentation of data in sufficient depth to compare the various alternatives for the proposed Navy actions including the "No Action" alternative. The EIS shall be of sufficient detail and in-depth analysis to assure that primary and secondary potentially significant effects that may result from the action have been identified and discussed, and to identify reasonable mitigation for any adverse effects that cannot be avoided. Major environmental issues that will be addressed in the EIS include, but are not limited to, air quality, water quality, wetlands, endangered species, cultural resources, and socioeconomic impacts.

The Navy will initiate a process for the purpose of determining the scope of issues to be addressed and for identifying significant issues relative to this action. The Navy will hold two public scoping meetings: The first, on Tuesday, December 7, 1993, beginning at 7 p.m. at the Flour Bluff ISD Auditorium, 2505 Waldron Road, Flour Bluff, Texas; and the second, on Wednesday, December 8, 1993, beginning at 7 p.m. onboard the USS Lexington Museum on the Bay, located just offshore from the Texas State Aquarium, Corpus Christi, Texas. These meetings will also be advertised in local newspapers in advance of the meetings.

A formal presentation will precede requests for public comment. Navy representatives will be available at this meeting to receive comments from the public regarding issues of concern. It is important that federal, state, and local agencies and interested individuals take this opportunity to identify environmental concerns that should be addressed during preparation of the EIS. In the interest of available time, each speaker will be asked to limit oral comments to five minutes.

Agencies and the public are also invited and encouraged to provide written comment in addition to, or in lieu of, oral comments at the public meeting. To be most helpful, scoping and comments should clearly describe specific issues or topics which the EIS should address. Written statements and/or questions regarding the scoping process should be mailed to: Commanding Officer, Southern Division, Naval Facilities Engineering Command, P.O. Box 190010, North Charleston, SC 29429–9010 (Attn: Will Sloger, Code 203WS), telephone (803) 743–0797. All comments must be received no later than December 23, 1993.

Dated: November 16, 1993.

Saundra K. Melancon,

Alternate Federal Register Liaison Officer.

[FR Doc. 93–28515 Filed 11–18–93; 8:45 am]

BILLING CODE [illegible]

Intent To Prepare an Environmental Impact Statement for the Proposed Disposal and Reuse of Naval Station Puget Sound, Seattle, WA

Pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969, as implemented by the Council on Environmental Quality regulations (40 CFR parts 1500–1508), the Department of the Navy announces its intent to prepare an Environmental Impact Statement (EIS) to evaluate the environmental effects of the disposal and reuse of the Naval Station (NAVSTA) Puget Sound, Seattle, Washington.

In accordance with recommendations of the 1991 Base Closure and Realignment Commission, the Navy plans to disestablish NAVSTA Puget Sound at Sand Point. Operations conducted at NAVSTA Puget Sound are currently relocating to other Naval installations located in the Puget Sound area. The proposed action involves the disposal of land, buildings, and infrastructure of NAVSTA Puget Sound for subsequent reuse.

The reuse of NAVSTA Puget Sound is being studied by an independent Base Reuse Committee (BRC) comprised of the City of Seattle, the Sand Point Community Liaison Committee, other local governmental agencies, and private citizens. The redevelopment/reuse plan to be developed by the BRC will be the basis for the EIS. The draft BRC plan calls for a multipurpose regional center with expanded recreational, educational, and cultural facilities, and affordable housing. The plan includes expansion of Magnuson Park with restoration of an original wetlands area called Mud Lake; a new indoor tennis center; a public park with a sailing center and access to Pontiac Bay; an education and community activities area; an arts center with performing, studio, and classroom spaces; 250 units of housing for homeless families in transition; allowance for future expansion of

University of Washington student family housing; and continuing use of existing facilities by two federal agencies.

Other reuse alternatives will be developed during the scoping process and analyzed to provide facilities and/or building sites for potential users. The Muckleshoot Indian Tribe has proposed an alternative plan that calls for a Native American vocational college (5,000 to 7,000 students); marina with general public recreational access; fisheries enhancement facility; restaurant; light industry spaces; a new "grand entrance" to Magnuson Park; and a handicapped accessible fishing pond. The "no action" alternative, Navy retention of NAVSTA Puget Sound land and infrastructure in caretaker status, will be addressed in the EIS.

However, because of the process mandated by the Base Closure and Realignment Act, selection of the "no action" alternative would be considered outside the jurisdiction of the Navy.

The EIS will address the potential environmental impacts associated with new, non-Federal uses proposed for NAVSTA Puget Sound. The following are known areas of concern: Effects of new development at Sand Point on the natural and socioeconomic environments, effects of future growth on area schools, recreation facilities, and transportation systems. Major environmental issues that will be addressed in the EIS include, but are not limited to, air quality, water quality, wetlands, endangered species, cultural resources, transportation, and socioeconomic impacts.

The Navy and the BRC will initiate a scoping process for the purpose of determining the scope of issues to be addressed and for identifying the significant issues related to the proposed reuse alternatives. A public scoping meeting is scheduled for Thursday, December 9, 1993, beginning at 7 p.m., at the National Oceanic and Atmospheric Administration facility, 7600 Sand Point Way NE., Building 9 Theater, Seattle, Washington. This meeting will be advertised in local newspapers.

A brief presentation will precede request for public comment. Navy representative will be available at this meeting to receive comments from the public regarding issues of concern to the public. It is important that federal, state, and local agencies and interested individuals take this opportunity to identify environmental concerns that should be addressed during the preparation of the EIS. In the interest of available time, each speaker will be asked to limit their oral comments to five minutes.

Agencies and the public are also invited and encouraged to provide written comment in addition to, or in lieu of, oral comments at the public meeting. To be most helpful, scoping comments should clearly describe specific issues or topics which the commentor believes the EIS should address. Written statements and or questions regarding the scoping process should be mailed no later than December 30, 1993, to: Commanding Officer, Engineering Field Activity Northwest, Naval Facilities Engineering Command, 3505 NW. Anderson Hill Road, Silverdale, Washington, 98383–9130 (Attn: Mr. Don Morris, Code 232DM), telephone (206) 396–5976.

Dated: November 16, 1993.

Saundra K. Melancon,

Alternate Federal Register Liaison Officer.

[FR Doc. 93–28516 Filed 11–18–93; 8:45 am]

BILLING CODE 3810-AE-M

DEPARTMENT OF EDUCATION

[CFDA Nos. 84.116A; 84.116B]

Fund for the Improvement of Postsecondary Education—Comprehensive Program (Preapplications and Applications) Notice Inviting Applications for New Awards for Fiscal Year (FY) 1994

Purpose of program: To provide grants or enter into cooperative agreements to improve postsecondary education opportunities.

Eligible applicants: Institutions of higher education or combinations of such institutions and other public and private nonprofit educational institutions and agencies.

Deadline for transmittal of preapplications: January 10, 1994.

Deadline for transmittal of final applications: April 19, 1994.

Note: All applicants must submit a preapplication to be eligible to submit a final application.

Deadline for intergovernmental review: June 20, 1994.

Applications available: November 19, 1993.

Available funds: The Fund for the Improvement of Postsecondary Education FY 1994 appropriation is $17,372,000. Of this amount, it is anticipated that approximately $4,500,000 will be available for an estimated 66 new awards under the Comprehensive Program.

Estimated range of awards: $15,000 to $150,000 per year.

Estimated average size of awards: $70,000.

Estimated number of awards: 66.

Note: The Department is not bound by any estimates in this notice.

Project period: Up to 36 months.

Applicable regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR Parts 74, 75, 77, 79, 80, 82, 85, and 86, with the exceptions noted in 34 CFR 630.4(b); and (b) The regulations for this program in 34 CFR Part 630.

Priorities

Under 34 CFR 75.105(c)(3), 34 CFR 630.12 and 34 CFR 630.11(a), the Secretary gives an absolute preference to applications that meet the following priority. The Secretary funds under this competition only applications that meet this absolute priority:

Absolute Priority

Projects to improve postsecondary education opportunities. Under 34 CFR 75.105(c)(1) and 34 CFR 630.12, the Secretary is particularly interested in applications that meet one or more of the following invitational priorities. However, an application that meets one or more of these invitational priorities does not receive competitive or absolute preference over other applications:

Invitational Priority 1—Applications to ensure that initial access to higher education is made more meaningful by improving retention and graduation rates without compromising academic standards, including retention of members of underrepresented minority groups at the undergraduate and graduate level.

Invitational Priority 2—Applications to improve the quality, accessibility, and retention rates of colleges and universities by helping them cooperate with elementary and secondary schools in the following areas: (i) the pre-service and in-service education of school teachers and administrators; (ii) articulation of school and postsecondary curricula between schools and colleges; (iii) the strengthening of incentives for schools to offer, and for their students to excel in, sound academic programs.

Invitational Priority 3—Applications to encourage institutions of higher education to join with employers and secondary schools in the development of new models for integrating work and learning.

Invitational Priority 4—Applications to support curriculum reforms at the undergraduate, graduate, and professional levels that will help students combine professional and technical expertise with an understanding of human diversity.

Invitational Priority 5—Applications to make campus culture more conducive to academic progress by all postsecondary students.

Invitational Priority 6—Applications to develop faculty as professionals by: (i) improving the preparation for teaching of Ph.D. candidates planning careers in teaching at the postsecondary level; (ii) recognizing and rewarding effective teaching through appointment, promotion, and compensation policies; (iii) developing more effective methods of postsecondary instruction; and (iv) providing new opportunities for faculty to stay current with developments in the broad range of areas they typically teach.

Invitational Priority 7—Applications to experiment with new ways to maintain the quality and accessibility of education despite shrinking resources.

Invitational Priority 8—Applications to disseminate properly researched and documented solutions to national problems in higher education from their original sites to other institutions.

Selection Criteria

In evaluating applications for grants under this program competition, the Secretary uses the following selection criteria chosen from those listed in 34 CFR 630.32:

(a) *Significance for Postsecondary Education.* The Secretary reviews each proposed project for its significance in improving postsecondary education by determining the extent to which it would—

(1) Address an important problem or need;

(2) Represent an improvement upon, or important departure from, existing practice;

(3) Involve learner-centered improvements;

(4) Achieve far-reaching impact through improvements that will be useful in a variety of ways and in a variety of settings; and

(5) Increase the cost-effectiveness of services.

(b) *Feasibility.* The Secretary reviews each proposed project for its feasibility by determining the extent to which—

(1) The proposed project represents an appropriate response to the problem or need addressed;

(2) The applicant is capable of carrying out the proposed project, as evidenced by, for example—

(i) The applicant's understanding of the problem or need;

(ii) The quality of the project design, including objectives, approaches, and evaluation plan;

(iii) The adequacy of resources, including money, personnel, facilities, equipment, and supplies;

(iv) The qualifications of key personnel who would conduct the project; and

(v) The applicant's relevant prior experience;

(3) The applicant and any other participating organizations are committed to the success of the proposed project, as evidenced by, for example—

(i) Contribution of resources by the applicant and by participating organizations;

(ii) Their prior work in the area; and

(iii) The potential for continuation of the proposed project beyond the period of funding (unless the project would be self-terminating); and

(4) The proposed project demonstrates potential for dissemination to or adaptation by other organizations, and shows evidence of interest by potential users.

(c) *Appropriateness of funding projects.* The Secretary reviews each application to determine whether support of the proposed project by the Secretary is appropriate in terms of availability of other funding sources for the proposed activities.

Under 630.32, the Secretary determines the methods that will be used in applying the selection criteria.

For preapplications (preliminary applications), the Secretary will give greater weight to the selection criteria under *Significance for Postsecondary Education.* The Secretary will give equal weight to *Feasibility,* and *Appropriateness of funding projects.* For final applications (final applications), all criteria are equally important. Within each of these criteria, the Secretary gives equal weight to each of the subcriteria. In applying the criteria, the Secretary first analyzes a preapplication or application in terms of each individual criterion and subcriterion. The Secretary then bases the final judgment of an application on an overall assessment of the degree to which the applicant addresses all selection criteria.

For applications or information contact: Fund for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education, 400 Maryland Avenue, S.W., Room 3100, ROB–3, Washington, D.C. 20202–5175. Telephone: (202) 205–0104 to order applications; or (202) 708–5750 for information.

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern time, Monday through Friday.

Program authority: 20 U.S.C. 1135–1135a–3.

Dated: November 16, 1993.

David A. Longanecker,

Assistant Secretary for Postsecondary Education.

[FR Doc. 93–28597 Filed 11–18–93; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Office of Fossil Energy

[Docket No. FE C&E 93–25—Certification Notice—125]

Notice of Filing Certification of Compliance: Coal Capability of New Electric Powerplant; Powerplant and Industrial Fuel Use Act

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Notice of filing.

SUMMARY: Portland General Electric Company has submitted a coal capability self-certification pursuant to section 201 of the Powerplant and Industrial Fuel Use Act of 1978, as amended.

ADDRESSES: Copies of self-certification filings are available for public inspection upon request in the Office of Fuels Programs, Fossil Energy, room 3F–056, FE–52, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT: Ellen Russell at (202) 586–9624.

SUPPLEMENTARY INFORMATION: Title II of the Powerplant and Industrial Fuel Use Act of 1978 (FUA), as amended (42 U.S.C. 8301 et seq.), provides that no new baseload electric powerplant may be constructed or operated without the capability to use coal or another alternate fuel as a primary energy source. In order to meet the requirement of coal capability, the owner or operator of such facilities proposing to use natural gas or petroleum as its primary energy source shall certify, pursuant to FUA section 201(d), to the Secretary of Energy prior to construction, or prior to operation as a base load powerplant, that such powerplant has the capability to use coal or another alternate fuel. Such certification establishes compliance with section 201(a) on the day it is filed with the Secretary. The Secretary is required to publish a notice in the **Federal Register** that a certification has been filed. The following owner/operator of a proposed new baseload powerplant has filed a self-certification in accordance with section 201(d).

Owner: Portland General Electric Company

Operator: Portland General Electric Company
Location: Near the City of Boardman, Oregon
Plant Configuration: Combined cycle cogeneration
Capacity: 442 megawatts
Fuel: Natural gas
Purchasing Utilities: Portland General Electric System
Expected In-Service Date: December 31, 1998

Issued in Washington, DC., November 15, 1993.

Anthony J. Como,

Director, Office of Coal & Electricity, Office of Fuels Programs, Office of Fossil Energy.

[FR Doc. 93–28512 Filed 11–18–93; 8:45 am]

BILLING CODE 6450–01–M

Federal Energy Regulatory Commission

[Docket Nos. QF94–15–000, et al.]

Massachusetts Institute of Technology (MIT), et al.; Electric Rate, Small Power Production, and Interlocking Directorate Filings

November 15, 1993.

Take notice that the following filings have been made with the Commission:

1. Massachusetts Institute of Technology (MIT)

[Docket No. QF94–15–000]

On November 8, 1993, Massachusetts Institute of Technology (MIT) of 77 Massachusetts Avenue, Cambridge, Massachusetts 02139–4307, submitted for filing an application for certification of a facility as a qualifying cogeneration facility pursuant to § 292.207 of the Commission's Regulations. No determination has been made that the submittal constitutes a complete filing.

According to the applicant, the topping-cycle cogeneration facility will be located on the MIT campus in Cambridge, Massachusetts, and will consist of a combustion turbine generator and a heat recovery boiler equipped with supplemental firing capability. Steam recovered from the facility will be used for heating and cooling campus buildings. The primary energy source will be natural gas. The maximum net electric power production capacity of the facility will be 22 MW. Installation of the facility began in the summer of 1993.

Comment date: Thirty days from publication in the **Federal Register**, in accordance with Standard Paragraph E at the end of this notice.

2. Boston Edison Co.

[Docket No. ER94–128–000]

Take notice that on November 8, 1993, Boston Edison Company (Edison) tendered for filing a Service Agreement for Reading Municipal Light Department (Reading), under its FERC Electric Tariff, Original Volume No. 2, Firm Transmission Service (the Tariff). The Service Agreement and its accompanying Exhibit C specify the amount and duration of transmission service required by Reading under the Tariff.

Edison requests waiver of the Commission's notice requirements to permit the Service Agreement to become effective as of the commencement date of the transaction to which it relates, November 1, 1993.

Edison states that it has served the filing on Reading and the Massachusetts Department of Public Utilities.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

3. New York State Electric & Gas Corporation

[Docket No. ER93–942–000]

Take notice that New York State Electric & Gas Corporation (NYSEG) on November 9, 1993, tendered for filing pursuant to § 35.12 of the Federal Energy Regulatory Commission's Rules of Practice and Procedure, 18 CFR 35.12 (1993), an amendment to its initial rate schedule that was filed on September 10, 1993 in the above-referenced docket. NYSEG's filing in this docket pertains to NYSEG's sale of up to 10 MW of energy to Burlington Electric Department (BED). The current filing is being made at Commission Staff's request, and explains various aspects of the agreement and modifies certain provisions of appendices A and B of the agreement. Transactions under the agreement commenced on September 13, 1993 and terminated on October 27, 1993.

NYSEG requests that September 13, 1993 be allowed as the effective date of this filing and requests waiver of the 60-day notice requirement.

NYSEG served copies of the filing upon the New York State Public Service Commission, Vermont Public Service Board, and BED.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

4. PSI Energy, Inc.

[Docket No. ER93–840–000]

Take notice that PSI Energy, Inc. (PSI) on November 8, 1993, tendered for filing a Attachment to the Third Supplemental Agreement to the Interim Scheduled Power Agreement between Wabash Valley Power Association, Inc. and PSI to the FERC Filing in Docket No. ER93–840–000 to comply with a FERC Staff request.

Copies of the filing were served on Wabash Valley Power Association, Inc. and the Indiana Utility Regulatory Commission.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

5. Pacific Gas and Electric Co.

[Docket No. ER94–134–000]

Take notice that on November 9, 1993, Pacific Gas and Electric Company (PG&E) tendered for filing a rate schedule change to Rate Schedule FERC No. 79, between PG&E, the Western Area Power Administration (Western), and the Trinity Public Utility District (TPUD).

PG&E's filing submits a Memorandum of Agreement No. 03–SAO–10152, entitled The Memorandum of Agreement Between Trinity County Public Utilities District, and Pacific Gas and Electric Company and United States Department of Energy Western Area Power Administration (Agreement 10152), to the Commission. Agreement 10152 sets forth the mechanism under which TPUD was served while PG&E performed scheduled maintenance on a segment of its transmission system on October 22, 1993. A related Operating Agreement and a related Letter Agreement were filed as well.

PG&E requested the appropriate waivers, seeking to have the rate schedule change become effective on October 22, 1993. The rate schedule is requested to be effective only until the completion of the scheduled maintenance.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

6. Iowa-Illinois Gas and Electric Co.

[Docket No. ER94–131–000]

Take notice that Iowa-Illinois Gas and Electric Company (Iowa-Illinois), 206 East Second Street, P.O. Box 4350, Davenport, Iowa 52808, on November 8, 1993, tendered for filing pursuant to § 35.12 of the Regulations under the Federal Power Act an initial rate schedule consisting of Facilities Schedule No. 5 dated October 25, 1993 (Facilities Schedule) to Facilities Agreement dated October 29, 1973 between Iowa-Illinois and Corn Belt Power Cooperative (Corn Belt).

Iowa-Illinois states that the Facilities Schedule provides for Corn Belt to

deliver energy required at Iowa-Illinois' Substation V to the point of connection between Iowa-Illinois and Corn Belt as described in the Facilities Schedule and for Iowa-Illinois to deliver an equivalent amount of energy including losses on a schedule basis to Corn Belt at Corn Belt's Webster Substation at 161 Kv. The Facilities Schedule also provides for the construction of facilities necessary to provide for these transactions, the wheeling rate to be charged by Corn Belt and a contribution in aid of construction by Iowa-Illinois.

The Facilities Schedule will be effective for a ten (10) year term commencing upon the later of the effective date of the acceptance for filing of the Facilities Schedule by the Commission or the in-service date of certain facilities described in the Facilities Schedule. The Facilities Schedule will continue in effect thereafter subject to termination upon three (3) years notice.

Iowa-Illinois requests the Commission to accept the Facilities Schedule for filing not later than January 15, 1994.

Copies of the filing were served upon the Iowa Utilities Board, the Illinois Commerce Commission and Corn Belt.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

7. Black Hills Corp.

[Docket No. ER94–130–000]

Take notice that Black Hills Corporation, which operates its electric utility business under the assumed name of Black Hills Power and Light Company (Black Hills) on November 8, 1993, tendered for filing an Agreement for Relocation of Lines and Joint Use of Transmission System, dated July 21, 1992 (Agreement), entered into between Black Hills and Tri-County Electric Association, Inc. (Tri-County).

The reasons for the Agreement are to provide for the relocation of certain 69 kV transmission lines of Tri-County to accommodate surface coal mining and to provide for the interconnection of Neil Simpson Unit No. 2, an 80 MW coal-fired electric power plant under construction by Black Hills to what are defined as Joint Use Facilities under the terms of the Agreement. The Agreement further provides for the exchange of breaker positions, the obligation of Black Hills to operate and maintain the Joint Use Facilities and the sharing of costs between Black Hills and Tri-County.

Copies of the filing were provided to Tri-County, Basin Electric Power Cooperative, Rushmore Electric Power Cooperative, Inc., Black Hills Electric Cooperative, Inc., Butte Electric Cooperative, Inc., PacifiCorp, the South Dakota Public Utilities Commission, the Wyoming Public Service Commission, and the Montana Public Service Commission.

Black Hills has requested that further notice requirements be waived and the acceptance of the Agreement for filing be entered forthwith.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

8. Wisconsin Power and Light Co.

[Docket No. ER94–135–000]

Take notice that on November 9, 1993, Wisconsin Power and Light Company tendered for filing with the Federal Energy Regulatory Commission two Letter Agreements between Wisconsin Power and Light Company (WP&L) and Water Works and Lighting Commission (WWLC). Under the Negotiated Capacity Agreement, WP&L will make capacity and associated energy available to WWLC with negotiated degress of firmness, variable capacity charges, and variable time duration. Under the Emergency Energy Agreement, WP&L will make emergency energy available to WWLC in quantities that, in WP&L's sole judgment, it can supply.

Wisconsin Power and Light respectfully requests a Waiver of Notice and an effective date of January 1, 1994, which is the earliest time that the Parties may begin transactions, else an effective date sixty (60) days from the date of filing.

A copy of the filing has been served on the Public Service Commission of Wisconsin.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

9. Iowa Southern Utilities Co.

[Docket No. ER94–99–000]

Take notice that Iowa Southern Utilities Company (ISU) on November 1, 1993, tendered for filing an Interconnection Contract, dated August 14, 1989, between ISU and the United States Department of Energy, Western Area Power Administration (WAPA). Iowa Southern requests the Commission, pursuant to the amnesty provisions issued in the Final Order in Docket PL93–2–002, to waive its prior notice requirements and authorize an effective date for the Agreement of August 14, 1989.

A copy of the filing was served upon Iowa State Utilities Board and WAPA.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

10. Montaup Electric Co.

[Docket No. ER94–96–000]

Take notice that on November 1, 1993, Montaup Electric Company (Montaup or the Company) tendered for filing rate schedule revisions incorporating the 1994 forecast billing rate for its purchased capacity adjustment clause (PCAC) for all-requirements service to Montaup's affiliates Eastern Edison Company (Eastern Edison) in Massachusetts and Blackstone Valley Electric Company (Blackstone) in Rhode Island and contract demand service to one affiliate Newport Electric Corporation and two non-affiliated customers: The Town of Middleborough in Massachusetts and the Pascoag Fire District in Rhode Island. The new forecase billing rate is $14,00231/kW-Mo. Montaup requests that the new rate become effective January, 1994 in accordance with the PCAC.

Montaup's filing was served on the affected customers, the Attorneys General of Massachusetts and Rhode Island, the Rhode Island Public Utilities Commission and the Massachusetts Department of Public Utilities.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

11. Pacific Gas and Electric Co.

[Docket No. ER94–132–000]

Take notice that on November 8, 1993, Pacific Gas and Electric Company (PG&E) tendered for filing an Enabling Agreement between Western Area Power Administration, Sacramento Area Office (Western) and PG&E. This Enabling Agreement documents that Western has under contract with PG&E control area services as necessary to allow its participation in the Western Systems Power Pool (WSPP), and explains how WSPP transactions will be integrated into the existing Western-PG&E contractual relationships. This Enabling Agreement also specifies that participation in the WSPP does not change the rights and obligations contained within the pre-existing PG&E-Western Agreement.

Copies of this filing have been served upon Western, WSPP and the California Public Utility Commission.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

12. Massachusetts Electric Co.

[Docket No. ER94–129–000]

Take notice that Massachusetts Electric Company (Mass. Electric), on November 8, 1993, tendered for filing a proposed distribution agreement with

the Massachusetts Bay Transportation Authority (MBTA). The agreement would provide firm distribution service to the MBTA over Mass. Electric's primary distribution system.

Mass. Electric requests that the proposed agreement be permitted to become effective on January 15, 1994.

A copy of the filing has been served upon the MBTA and the Massachusetts Department of Public Utilities.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

13. Montaup Electric Co.

[Docket No. ER94-97-000]

Take notice that on November 1, 1993, Montaup Electric Company (Montaup or the Company) filed, as an informational filing, a report titled Conservation and Load Management Annual Report Information Filing, and Projected Revenue Requirements—October 29, 1993—describing the activities performed by Montaup in designing, implementing, monitoring and evaluating Conservation and Load Management (C&LM) programs as part of a cooperative effort at the state level in Massachusetts and Rhode Island. This informational filing is required under the revised C&LM clause which was approved by the Commission in Docket No. ER93-080 on May 4, 1993, and which is contained in Montaup's wholesale rate schedules for services to its affiliates, Eastern Edison Company (Eastern Edison) in Massachusetts and Blackstone Valley Electric Company (Blackstone) and Newport Electric Corporation (Newport) in Rhode Island. The informational filing establishes estimated C&LM costs to be used under the adjustment mechanism effective January 1, 1994, subject to subsequent true-up.

Under the C&LM mechanism, the adjustments becomes final unless protests are filed or an investigation ordered within 90 days of the filing of the report. The 90-day period allows time for any issues to be resolved. Accordingly, the time for filing protests is set at January 31, 1994.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

14. Pacific Gas and Electric Co.

[Docket No. ER94-154-000]

Take notice that on November 9, 1993, Pacific Gas and Electric Company (PG&E) tendered for filing a supplement to its November 17, 1992 filing in this docket pursuant to FERC staff's December 22, 1992 request for supplemental information for Agreement Nos. 7, 10, 11, 13, 14, 15, 16, 17, 18, 19, 28, 29, 30 and 31.

Copies of this filing have been served upon the parties on the service list including the California Public Utilities Commission.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

Standard Paragraphs

E. Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93-28469 Filed 11-18-93; 8:45 am]

BILLING CODE 6717-01-P

[Docket No. ER94-138-000, et al.]

Portland General Electric Co., et al.; Electric Rate, Small Power Production, and Interlocking Directorate Filings

November 12, 1993.

Take notice that the following filings have been made with the Commission:

1. Portland General Electric Co.

[Docket No. ER94-138-000]

Take notice that on November 10, 1993, Portland General Electric Company (PGE) tendered for filing the One Year Share-the-Shortage Agreement (the Agreement) among the following parties: Idaho Power Company; The Montana Power Company; PacifiCorp; Portland General Electric Company; Puget Sound Power & Light Company; The Washington Water Power Company; Bonneville Power Administration; Public Utility District No. 1 of Chelan County; Public Utility District No. 1 of Cowlitz County; Public Utility District No. 1 of Douglas County; Public Utility District No. 2 of Grant County; Public Utility District No. 1 of Pend Oreille County; The Eugene Water & Electric Board; City of Seattle acting by and through its City Light Department; City of Tacoma acting by and through its Public Utilities Department.

PGE states that the Agreement relates to service for the purpose of alleviating energy shortages of one or more of the parties to the agreement and to help ensure that all of the parties can meet their obligations to serve their respective retail customer loads. PGE further states that a copy of the filing was served upon the parties to the Agreement. PGE states that under the provisions of 18 CFR 35.11, the parties request that the Commission grant waiver of the notice requirements of 18 CFR 35.3 to allow the agreement to take effect as early as December 1, 1993.

Comment date: November 22, 1993, in accordance with Standard Paragraph E at the end of this notice.

2. Northeast Utilities Service

[Docket Nos. ER93-867-000 ER93-884-000 ER93-901-000 ER93-913-000]

Take notice that on November 1, 1993, Northeast Utilities Service Company (NUSCO) tendered for filing a response to a deficiency letter issued by the Commission Staff and Amendments to four Service Agreements provide for transmission to the NU System Companies for their power sales to South Hadley Electric Light Department, Georgetown Municipal Light Department, Middleton Municipal Electric Department and Vermont Public Power Supply Authority. NUSCO does not foresee the incurrence of Out of Rate Costs associated with this transmission service. NUSCO states that this filing is in accordance with the Commission's filing requirements and that copies of the filing have been mailed to South Hadley, Georgetown, Middletown and Vermont Public Power Supply Authority.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

3. Southern California Edison Co.

[Docket No. ER91-201-003]

Take notice that on October 29, 1993, Southern California Edison Company tendered for filing its compliance filing tin the above-referenced docket.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

4. Arizona Public Service Co.

[Docket No. ER93-656-000]

Take notice that on November 5, 1993, Arizona Public Service Company (APS) tendered for filing information in response to Staff's request for clarification related to APS' filings in this Docket.

Copies of this filing have been served upon the Yuma Cogeneration Associates and the Arizona Corporation Commission.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

5. WestPlains Energy, a division of UtiliCorp United, Inc.

[Docket No. ER94–127–000]

Take notice that on November 5, 1993, WestPlains Energy, a division of UtiliCorp United, Inc. (WestPlains) tendered for filing revised full requirements contracts between WestPlains and the cities of Cimarron, Holyrood and Montezuma Kansas. Each of these cities currently takes full requirements service pursuant to Service Schedule 88–MWH–5. Under the new agreements, each city will take service pursuant to existing Service Schedule 89–MWH–5.

Given the impending expiration dates for the existing contracts with each of the cities, WestPlains requests that the subject agreements be made effective as soon as practicable, but in no event later than 60 days from the date of this filing.

A copy of the filing was served upon each of the cities and the Kansas Corporation Commission.

Comment date: November 29, 1993, in accordance with Standard Paragraph E at the end of this notice.

Standard Paragraphs

E. Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–28471 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–P

[Docket No. CP93–258–001, et al.]

Mojave Pipeline Company, et al. Natural Gas Certificate Filings

November 12, 1993.

Take notice that the following filings have been made with the Commission:

1. Mojave Pipeline Co.

[Docket No. CP93–258–001]

Take notice that on November 8, 1993, Mojave Pipeline Company (Mojave) filed in Docket No. CP93–258–001, pursuant to section 7(c) of the Natural Gas Act (NGA) and Rule 215 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (Commission), an amendment to its initial application for a certificate of public convenience and necessity, filed March 17, 1993, in Docket No. CP93–258–000, all as more fully set forth in the amendment to the application on file with the Commission and open for public inspection.

On March 17, 1993, Mojave filed an application for an optional certificate of public convenience and necessity to construct, install, and operate certain pipeline, compression and related facilities for the purpose of extending its pipeline into central and northern California (the Northward Expansion). To facilitate the transportation of gas to these new markets, Mojave's application also proposed to expand Mojave's existing mainline through the addition of looping and compression. Mojave requested the Commission issue a certificate prior to April 1, 1994, in order to meet the projected in-service date of April 1, 1995.

In its initial application, Mojave submitted for Commission review two alternative designs for the Northward Expansion facilities. Under the first alternative (Case 1), Mojave proposed to construct a 475 MMcf/d expansion on a stand-alone basis, requiring the construction of new mainline and related facilities and additional looping on Mojave's existing facilities, as well as a number of additional meter stations. Under the second alternative (Case 2), Mojave's proposed 475 MMcf/d expansion would be built in conjunction with a proposed expansion by Kern River Gas Transmission Company (Kern River) of 452 MMcf/d. Kern River's proposal is currently pending review at Docket No. CP92–198–000.

Mojave states that five categories of modifications are being made by this amendment. The first category concerns modifications to three exhibits that result from a change in Mojave's ownership. The second category concerns certain modifications to the Construction, Operation and Maintenance Agreement (CO&M) between Kern River and Mojave.

Mojave states that the third category concerns modifications that are being made to reflect Mojave's decision to consolidate and relocate certain compression facilities required for expansion, which results in additional looping of existing facilities. Specifically, Mojave states that it modifies its Case 1 to replace the two separate gas turbine compressor stations with a single compressor station having three electric motor-driven compressors located on the Common Facilities immediately downstream of Daggett. Mojave states that there are environmental benefits associated with this modification. Mojave also proposes to increase its looping under Case 1 by 31.2 miles and by approximately 37.1 miles under Case 2.

Mojave states that the fourth category of modifications concerns certain minor facilities changes that are being made to meet customer's stated needs. Specifically, Mojave's amendment eliminates two segments which were originally proposed: the Benecia and Fairfield segments. Mojave states that these modifications also should further optimize and reduce the environmental impacts of Mojave's proposal. The modifications result in the relocation and elimination, and some resizing, of a limited number of facilities. In addition, certain meter stations are being relocated, added or eliminated.

The final category of changes concerns certain amendments of Mojave's proposed tariff. Mojave states that these changes reflect recent changes Mojave has made to its existing tariff as a result of Order No. 636, as well as a few minor changes made to respond to the market and one additional provision necessitated by Mojave's proposal to construct a compressor station with electric-driven motors. Specifically, Mojave proposes a new emergency curtailment provision and a new tariff provision to account for the cost of electric power that will be incurred to operate the electric motor-driven compression facilities near Daggett. Mojave states that none of the modifications affect Mojave's proposed rates.

Comment date: December 1, 1993, in accordance with Standard Paragraph F at the end of this notice.

2. North Country Gas Pipeline

[Docket Nos. CP89–362–004, CP89–363–004]

Take notice that on November 3, 1993, North Country Gas Pipeline Corporation (North Country), Five Post

Oak Park, Suite 1400, Houston, Texas 77027, filed in Docket Nos. CP89–362–004 and CP89–363–004, a request for amendment of its authorization under section 3 of the Natural Gas Act and Presidential Permit [1] to provide for the construction of a gas odorization station and related facilities near the United States/Canada border, all as more fully set forth in the request which is on file with the Commission and open for public inspection.

North Country proposes to amend its authorization to site, construct, operate and maintain natural gas pipeline facilities at the United States/Canada border near Champlain, New York, as part of a pipeline to be constructed by North Country to transport gas from an interconnection with TransCanada Pipelines Limited (TransCanada) to customers in Clinton County, New York. North Country proposes to install a gas odorization station and related facilities near the international border.

North Country is proposing to construct such an odorization station, which would be located approximately 20 feet south of the international boundary. The current odorization station under construction is considered to be too far from the origin of the North Country pipeline system because one and one-half miles of the pipeline would contain gas that is not odorized. North Country expects that the Public Service Commission of the State of New York, (NYPSC) would not permit it to operate the pipeline unless it agrees to construct an odorization station substantially closer to the border.

The proposed station would consist of a building approximately 12 by 20 feet containing odorization equipment. The building would be surrounded by a small fenced-in yard to prevent public access. Additionally, North Country would construct an access road approximately two-thirds of a mile in length to connect the station with existing roads.

North Country respectfully requests that the Commission approves the amendment requested herein on an expedited basis. North Country understands that the NYPSC staff desires the proposed odorization station be constructed and placed in service as soon as possible. The NYPSC staff is permitting North Country to commence operation of its intrastate pipeline prior to the completion of the new station on the premise that North Country will proceed to install such a station promptly, hopefully within three to six months.

[1] 55 FERC ¶61,011 (April 3, 1991); 55 FERC ¶61,262 (June 3, 1992).

Comment date: November 22, 1993, in accordance with the first paragraph of Standard Paragraph F at the end of this notice.

Standard Paragraphs

F. Any person desiring to be heard or to make any protest with reference to said application should on or before the comment date, file with the Federal Energy Regulatory Commission, Washington, DC 20426, a motion to intervene or a protest in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the Natural Gas Act (18 CFR 157.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a motion to intervene in accordance with the Commission's Rules.

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by sections 7 and 15 of the Natural Gas Act and the Commission's Rules of Practice and Procedure, a hearing will be held without further notice before the Commission or its designee on this application if no motion to intervene is filed within the time required herein, if the Commission on its own review of the matter finds that permission and approval for the proposed abandonment are required by the public convenience and necessity. If a motion for leave to intervene is timely filed, or if the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for applicant to appear or be represented at the hearing.

Lois D. Cashell,

Secretary.

[FR Doc. 93–28470 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–P

[Docket No. RP93–186–000]

Carnegie Natural Gas Co.; Technical Conference

November 15, 1993.

In the Commission's order issued on September 30, 1993, in the above-captioned proceeding, the Commission held that the filing raises issues for which a technical conference is to be convened. The conference to address the issues has been scheduled for Tuesday, December 7, 1993, at 10 a.m., in a room to be designated at the offices of the Federal Energy Regulatory Commission, 810 First Street, NE., Washington, DC 20426.

All interested persons and Staff are permitted to attend.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28462 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket Nos. RS92–15–008 and RP93–62–008]

Equitrans, Inc.; Proposed Changes in FERC Gas Tariff

November 15, 1993.

Take notice that on November 10, 1993, Equitrans, Inc. (Equitrans) tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, the following proposed tariff sheets.

Substitute Original Sheet No. 5
Substitute Original Sheet No. 6
Substitute Original Sheet No. 7
Substitute Original Sheet No. 8
Substitute First Revised Sheet No. 5
Substitute First Revised Sheet No. 6
Substitute First Revised Sheet No. 8

The proposed substitute original sheets contain an effective date of September 1, 1993. The proposed substitute revised sheets contain an effective date of October 1, 1993. Equitrans respectfully requests the Commission to waive all necessary rules and regulations to accept the substitute original sheets retroactive to September 1, 1993, the date on which the original sheets implementing Equitrans' Order No. 636 restructuring took effect, and to accept the substitute revised sheets retroactive to October 1, 1993, the date on which Equitrans' first revised sheets reflecting the increase in the Commission's ACA charge took effect.

Equitrans states that this filing is made to correct an inadvertent error in the calculation of transportation rates which is related to the change in the definition of billing demand for Equitrans' storage transportation customers which the Commission approved in Docket No. RS92–15. Prior to Order No. 636 a discrepancy existed between the manner in which Equitrans' contract storage customers were permitted to utilize transportation service related to storage, and the manner in which they were billed for storage transportation. This billing practice undervalued the rights of contract storage customers to demand

transportation related to storage injections and withdrawals and resulted in a misallocation of costs between storage and non-storage transportation customers. Equitrans proposed as part of its Order No. 636 compliance filings to change the basis for calculating billing demand for existing storage transportation customers under Rate Schedules STS–1 and FTS in order to make the billing calculation for the storage transportation demand charge consistent with the actual rights of storage customers to call upon storage transportation service. The Commission approved these tariff sheets in its Orders on August 2, 1993 and October 29, 1993. See Equitrans Inc., 64 FERC ¶ 61,155 (1993); 65 FERC ¶ 61,132 (1993).

Equitrans states that in calculating the rates for its transportation services for the period beginning on September 1, 1993, Equitrans inadvertently based its rates forward on the lower historical demand billing units for storage transportation customers, thus resulting in an overstated rate for all transportation service. Equitrans is making this filing to correct the error in rate calculation, and to comport the method of calculating transportation rates with the tariff definition of billing demand for storage transportation service approved by the Commission. This filing results in a reduction in the demand component of all firm transportation rates and a reduction in the commodity component of Equitrans' ITS rates. Workpapers supporting the calculation of rates is included with this filing.

The miscalculated transportation rates were in effect for the months of September and October. Upon approval of these tariff sheets by the Commission, Equitrans will calculate the level of overcollection for these months from each transportation customer, and will provide a billing credit for the amount of the overcollection, plus interest at the FERC-approved interest rate, on the November billing statements to trans portation customers.

Accordingly, Equitrans requests that the enclosed sheets reflecting these corrections be accepted for filing, and that the Commission grant all waivers necessary to give the substitute original and substitute revised sheets an effective date of September 1, 1993 and October 1, 1993, respectively, to correspond with the effective date of the original and revised tariff sheets.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests should be filed on or before November 22, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28458 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–187–005]

Equitrans, Inc.; Proposed Changes in FERC Gas Tariff

November 15, 1993.

Take notice that on November 10, 1993, Equitrans, Inc. (Equitrans) tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, the following proposed tariff sheets, with a proposed effective date of March 1, 1994:

2nd Substitute Second Revised Sheet No. 5
2nd Substitute Second Revised Sheet No. 6
2nd Substitute First Revised Sheet No. 7
2nd Substitute Second Revised Sheet No. 8
2nd Substitute First Revised Sheet No. 203

Equitrans states that it has discovered that an error appears on Sheet No. 203 included with the September 2 filing. Equitrans inadvertently omitted language from Section 1.22 of the General Terms and Conditions concerning the definition of billing demand in Section 1.22 of the General Terms and Conditions which is part of its currently effective tariff and which Equitrans intended to retain. Equitrans is including for filing 2nd Substitute First Revised Sheet No. 203 which corrects the error, and comports with the language which is currently in Equitrans' tariff.

Equitrans states that the change in the definition of billing demand was approved by the Commission in Equitrans' restructuring proceeding in Docket No. RS92–15, and results in higher demand billing units for certain storage transportation customers under Equitrans' Rate Schedules STS–1 and FTS. The utilization of higher demand billing units in developing rates for Rate Schedules STS–1 and FTS results in a lower unit demand charge for those services. The reduced rates for Rate Schedule FTS also reduces Equitrans' rates for Rate Schedules NOFT and ITS, which are derived from its FTS rates. However, Equitrans states that in calculating the rates for these services, Equitrans inadvertently based its filed rates in this proceeding on the lower historical demand billing units for storage transportation customers, thus resulting in an overstated rate for all transportation services. Equitrans is filing revised rate sheets herein to correct the error in rate calculation, and to comport the method of calculating transportation rates with the tariff definition of billing demand for storage transportation service approved by the Commission. Equitrans states that this filing results in a reduction in the demand component of all firm transportation rates and a reduction in the commodity component of Equitrans' ITS rates, over the rates included in the September 2 filing.

Accordingly, Equitrans requests that the enclosed sheets reflecting these corrections be accepted for filing, and that the sheets be given an effective date of March 1, 1994, to correspond with the effective date of the rate filing.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests should be filed on or before November 22, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28459 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TX94–3–000]

Minnesota Municipal Power Agency; Filing

November 12, 1993.

Take notice that on November 9, 1993, the Minnesota Municipal Power Agency (MMPA) filed an Application for Order requiring Transmission Service to be provided by the Southern Minnesota Municipal Power Agency (SMMPA). The application and complaint has been filed pursuant to section 211 of the Federal Power Act, as amended by the Energy Policy Act of 1992 (16 U.S.C. 824j).

The Applicant is a Minnesota political subdivision formed to sell electric energy at wholesale to its member and customers who are the Cities of Anoka, Arlington, Brownton, Chaska, Le Sueur, North Saint Paul,

Olivia, Shakopee, and Winthrop, Minnesota. The Applicant alleges that SMMPA has offered MMPA a "point to point" transmission service agreement that contains unjust and unreasonable terms and conditions, and a transmission service rate that is unreasonable.

A copy of the filing was served on SMMPA, the City of Rochester, Minnesota, Northern States Power Company, and United Power Association.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before December 9, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28460 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket Nos. RP94–26–000]

Transcontinental Gas Pipe Line Corp.; Technical Conference

November 15, 1993.

In the Commission's order issued on October 29, 1993, in the above-captioned proceeding, the Commission held that the filing raises issues for which a technical conference is to be convened. The conference to address the issues has been scheduled for Thursday, December 2, 1993, at 10 a.m., in a room to be designated at the offices of the Federal Energy Regulatory Commission, 810 First Street, NE., Washington, DC 20426.

All interested persons and Staff are permitted to attend.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28461 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket Nos. RP92–149–001 and 002]

Transcontinental Gas Pipe Line Corp.; Filing

November 12, 1993.

Take notice that on October 28, 1993, Transcontinental Gas Pipe Line Corporation (Transco) and Columbia Gas Transmission Corporation (Columbia) jointly filed a letter with the Commission's Secretary advising the Commission that they had resolved between themselves the remaining issues in the above-captioned proceedings. They ask that the Commission accept and approve this agreed-upon resolution, and cancel the technical conference it had previously ordered be conducted.

The letter recites that Transco and Columbia have agreed that, in resolution of all issues in the above-captioned Order No. 94 proceedings, Transco will refund to Columbia the amount of $1,426,820.97, inclusive of principal and interest, within ten (10) days after such time as (i) the Commission has approved without material alteration Transco's and Columbia's agreed resolution of all issues herein, and (ii) the United States Court of Appeals for the District of Columbia Circuit has granted the Commission's pending motion for leave to issue its August 6, 1993, order in these proceedings. Such payment shall constitute full and final resolution of all issues herein, and neither Transco nor Columbia shall be entitled to any further payments or refunds, or to any interest thereon, in connection with these or any other proceedings concerning Transco's collection from or refund to Columbia of amounts related to Transco's payment of Order No. 94 allowances to its gas suppliers. Transco and Columbia believe that this agreed resolution of all issues obviates the need for a technical conference to be held.

Take further notice that this proposed resolution between Transco and Columbia shall be treated as an offer of settlement. As such, the provisions of Rule 602 of the Commission's Rules of Practice and Procedure, 18 CFR 385.602 (1993), shall apply.

Any person desiring to comment upon this filing should file comments with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Comments are due on or before November 29, 1993, with reply comments due within 10 days thereafter.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 93–28463 Filed 11–18–93; 8:45 am]

BILLING CODE 6717–01–M

ENVIRONMENTAL PROTECTION AGENCY

[FRL–4803–7]

Acid Rain Permits

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final permits.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is issuing five-year Acid Rain permits, according to the Acid Rain Program regulations (40 CFR part 72), to the following 5 utility plants: Gen J M Gavin in Ohio; Armstrong and Portland in Pennsylvania; and Fort Martin and Harrison in West Virginia.

FOR FURTHER INFORMATION CONTACT: For Armstrong and Portland: David Campbell at (215) 597–9781; for Fort Martin and Harrison: James Topsale at (215) 597–6553. Air, Radiation and Toxics Division, EPA Region 3 (3AT–22), 841 Chestnut Bldg., Philadelphia, PA 19107.

For Gen J M Gavin: Allan Batka at (312) 353–7316. Air and Radiation Division, EPA Region 5, 77 West Jackson Blvd. (A–18J), Chicago, IL 60604.

Dated: November 15, 1993.

Renee Rico,

Acting Director, Acid Rain Division, Office of Atmospheric Programs, Office of Air and Radiation.

[FR Doc. 93–28530 Filed 11–18–93; 8:45 am]

BILLING CODE 6560–50–P

[FRL–4803–6]

Public Water System Supervision Program Revision for the State of New York

AGENCY: United States Environmental Protection Agency (USEPA).

ACTION: Notice.

SUMMARY: The purpose of this notice is to inform the public of the scheduling of a Public Hearing regarding the United States Environmental Protection Agency's (EPA) Determination to approve the State of New York's requested revision to its Public Water System Supervision Primacy Program for compliance with the National Primary Drinking Water Regulations for the Surface Water Treatment Rule. The State of New York has adopted drinking water regulations that satisfy the National Primary Drinking Water Regulations (NPDWR), (40 CFR 142.10) to the federal Safe Drinking Water Act (SDWA), (42 U.S.C. 300 *et seq*), for the Surface Water Treatment Rule (SWTR)

(40 CFR part 141, subpart H), promulgated by USEPA on June 29, 1989 (54 FR 27486). The New York State regulations are contained in the Public Water Supplies Section of the Drinking Water Supplies Law (New York Code of Rules and Regulations Title 10 (Health), Chapter I, Part 5, Subpart 5–1): 5–1.1, 5–1.22, 5–1.30 (definitions); 5–1.52 (maximum contaminant levels for turbidity); 5–1.1, 5–1.30, 5–1.77, 5–1.78 (public notification); 5–1.30, 5–1.72, 5–4.2 (treatment requirements); 5–1.1, 5–1.20, 5–1.52 (criteria for avoiding filtration); 5–1.30, 5–1.52 (disinfection); 5–1.30, 5–1.52, 5–1.72, 5–1.74, 5–1.77 (monitoring and analysis); and 5–1.91, 5–1.92 (variances and exemptions).

The USEPA has determined that New York's SWTR regulations are no less stringent than the corresponding Federal regulations and that New York continues to meet all requirements for primary enforcement responsibility as specified in 40 CFR 142.10. Therefore, the USEPA has determined to approve the State of New York's requested revision to its Public Water System Supervision Primacy Program for compliance with the NPDWR for the SWTR.

Public Hearing

EPA has scheduled the public hearing on the Determination for Tuesday, December 7, 1993 at 6 p.m. in the New York State Legislative Office Building, Hearing Room B, Empire State Plaza, Albany, New York. The purpose of the public hearing is to offer interested persons the opportunity to comment on EPA's determination. To accommodate all persons wishing to speak, oral presentations may be limited to ten minutes per speaker and should only address EPA's determination and the information on which the determination is based. Written comments may also be submitted up until the completion of the Public Hearing.

All documents relating to this determination may be inspected and copied at a charge of $0.15 per copy sheet between the hours of 9 a.m. and 4:30 p.m., Monday through Friday, at the following offices:

New York State Department of Health, Bureau of Public Water Supply Protection, room 406, 2 University Plaza/Western Avenue, Albany, New York 12203–3399.

U.S. Environmental Protection Agency—Region II, Public Water System Supervision Section, room 853, Jacob K. Javits Federal Building, 26 Federal Plaza, New York, New York 10278.

For further information, you may contact: Walter E. Andrews, Chief, Drinking and Groundwater Protection Branch, U.S. Environmental Protection Agency—Region II, (212) 264–1800.

Authority: Section 1413 of the Safe Drinking Water Act, as amended, and 40 CFR 142.10 of the NPDWR.

Dated: October 25, 1993.

Kathleen C. Callahan,

Acting Regional Administrator, EPA, Region II.

[FR Doc. 93–28532 Filed 11–18–93; 8:45 am]

BILLING CODE [illegible]

[ER–FRL–4705–7]

Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared November 1, 1993 through November 5, 1993 pursuant to the Environmental Review Process (ERP), under section 309 of the Clean Air Act and section 102(2)(c) of the National Environmental Policy Act as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at (202) 260–5076.

An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated April 10, 1993 (58 FR 18392).

Draft EISs

ERP No. D–AFS–K65152–CA Rating EO2, Hamm-Hasloe Reforestation Project, Implementation, Stanislaus National Forest, Groveland Ranger District, Tuolumne and Mariposa Counties, CA.

SUMMARY: EPA expressed environmental objections because of potential adverse impacts to human health, fisheries and riparian ecosystems due to the use of herbicides including a highly mobile chemical (hexazinone). EPA stated that the cumulative impacts of herbicide applications were not sufficiently examined in the DEIS and that mitigation measures were not clearly identified. EPA requested that the final EIS include a full discussion of cumulative impacts of herbicide applications and mitigation measures.

ERP No. D–COE–E40749–NC Rating EC2, Fairfield Bridge Replacement Project, Implementation, Atlantic Intracoastal Waterway, Hyde County, NC.

SUMMARY: EPA expressed a degree of environmental concerns about mitigating the unavoidable losses associated with constructing the Fairfield Bridge. While the mitigation plan seems satisfactory, additional explanation/verification should be provided in the final document.

ERP No. D–FHW–F40334–WI Rating EU3, Lake Arterial Extension, WI–TH–31 to Layton Avenue, Funding and Possible COE Section 404 Permit, Kenosha, Racine and Milwaukee Counties, WI.

SUMMARY: EPA determined that two of the build alternatives were environmentally unacceptable due to adverse impacts to high quality advanced identification wetlands. EPA also determined that the document was inadequate since it lacks information concerning the location of the advanced identification wetlands. EPA expressed environmental objections and concerns regarding two other build alternatives that impacted fewer wetlands. EPA has no objections to the no build alternative which FHWA has indicated will be selected in the final EIS.

ERP No. D–FHW–F40335–OH Rating EC2, OH–129/Princeton Road Transportation Improvements, from OH–129 to OH–4 in the City of Hamilton and I–75, Funding, NPDES Permit and COE Section 404 Permit, Butler County, OH.

SUMMARY: EPA expressed environmental concerns regarding the relocation alternative and stated that the upgrade alternative was environmentally preferable.

ERP No. D–FHW–F40336–IL Rating EC2, IL–13 (FAP–331) Transportation Improvements from west of the Illinois Central Railroad to US 45 east of Harrisburg, Funding, COE Section 404 and NPDES Permits, Williamson and Saline Counties, IL.

SUMMARY: EPA expressed environmental concerns regarding wetland delineation and wetland compensation. EPA requested additional discussions on these issues be included in the final EIS.

ERP No. D–FHW–G40138–TX Rating LO1, US 82 Highway (East-West Freeway in the City of Lubbock) Transportation Improvements from South of Loop 289 to East of I–27 and Relocation of the Seagraves, Whiteface and Lubbock Railroad, Funding and Right-of-Way Grant, Lubbock County, TX.

SUMMARY: EPA had no objections to the proposed project.

ERP No. D–UAF–K11102–AZ Rating EC2, Williams Air Force Base (AFB) Disposal and Reuse, Implementation and Permit Approval, City of Mesa, Maricopa County, AZ.

SUMMARY: EPA expressed environmental concerns regarding the interaction of the base reuse and installation restoration programs, the analysis of cumulative environmental impacts, air quality impacts, and the maintenance of biodiversity. EPA

encouraged the Air Force to take a leadership role in promoting pollution prevention and waste minimization, and in protecting sensitive natural resources at Williams AFB.

ERP No. DS–FHW–D40260–PA Rating EC1, Mon/Fayette Transportation Project, I–70 in Fallowfield Township to PA–51 in Jefferson Borough Updated Information concerning the addition of the Green Alignment Alternative, Funding, COE Section 404 and NPDES Permits, Mon Valley, Washington and Allegheny Cos., PA.

SUMMARY: EPA expressed environmental concerns regarding potential impacts to wetlands, streams and residences. EPA requested additional discussions and ways to minimize these impacts be included in the final EIS.

Final EISs

ERP No. F–COE–F35040–OH Cleveland Harbor Dike 14 Confined Disposal Facility (CDF) for Dredged Material, Modifications Cuyahoga County, OH.

Summary: EPA expressed environmental concerns regarding sedimentation from land erosion, possible resuspension of contaminated sediments and airborne sediments. EPA recommended that native flora and trees be planted once the CDF is filled to capacity.

Dated: November 16, 1993.

William D. Dickerson,

Deputy Director, Office of Federal Activities.

[FR Doc. 93–28527 Filed 11–18–93; 8:45 am]

BILLING CODE 6560–50–U

[ER–FRL–4705–6]

Environmental Impact Statements; Availability

Responsible agency: Office of Federal Activities, General Information (202) 260–5076 or (202) 260–5075.

Weekly receipt of Environmental Impact Statements Filed November 8, 1993 through November 12, 1993 pursuant to 40 CFR 1506.9.

EIS No. 930396, Final EIS, NPS, WY, Fort Laramie National Historic Site, General Management Plan and Development Concept Plan, Implementation, Fort Laramie, Goshen County, WY, Due: December 20, 1993, Contact: Gary Candelaria (307) 837–2221.

EIS No. 930397, Revised Draft EIS, FAA, MN, Minneapolis-St. Paul International Airport, Runway 4–22 Extension, Revised Information and Funding, Wold-Chamberlain Field, Hennepin County, MN, Due: January 3, 1994, Contact: Glen Orcutt (612) 725–4221.

EIS No. 930398, Draft EIS, AFS, WA, Dry Smith Timber Sale, Implementation, Gifford Pinchot National Forest, Packwood and Randle Ranger Districts, Lewis County, WA, Due: January 10, 1994, Contact: Randy Shepard (206) 494–5515.

EIS No. 930399, Final EIS, MMS, AL, LA, MS, TX, 1994 Central and Western Gulf of Mexico Outer Continental Shelf (OCS) Oil and Gas Sales 147 (March 1994) and 150 (August 1994), Lease Offering, AL, MS, LA and TX, Due: December 20, 1993, Contact: Richard H. Miller (703) 787–1665.

EIS No. 930400, Draft EIS, UAF, FL, Homestead Air Force Base (AFB) Disposal and Reuse, Implementation, Dade County, FL, Due: January 3, 1994, Contact: Ltc. Gary Baumgartel (210) 536–3869.

EIS No. 930401, Final EIS, AFS, CA, Lowell Hill Area, Nevada City Ranger District and near Brandy City, Downieville Ranger District, Long-Term Soil Productivity Study, Implementation, Tahoe National Forest, Nevada and Sierra Counties, CA, Due: December 20, 1993, Contact: Martha Twarkin (916) 478–6293.

EIS No. 930402, Draft EIS, AFS, CO, Boulder Hydro Gravity Line Land Use Authorization, Special-Use-Permit, Roosevelt National Forest, Boulder County, CO, Due: January 3, 1994, Contact: Jean Thomas (303) 498–1267.

EIS No. 930403, Draft EIS, AFS, CO, Long Draw Reservoir and Dam Land Use Authorization, Special-Use-Permit, Roosevelt National Forest, Larimer County, CO, Due: January 3, 1994, Contact: Jean Thomas (303) 498–1267.

EIS No. 930404, Draft EIS, AFS, CO, Joe Wright Reservoir and Dam Land Use Authorization, Special Use Permit, Roosevelt National Forest, City of Fort Collins, Larimer County, CO, Due: January 3, 1994, Contact: Jean Thomas (303) 498–1267.

EIS No. 930405, Draft EIS, BPA, WA, Puget Power Northwest Washington Electric Transmission Project; Construction and Operation, Whatcom and Skagit Counties, WA, Due: January 14, 1994, Contact: John Taves 1 (800) 622–4520.

EIS No. 930406, Final Supplement, USN, WA, Puget Sound Area Carrier Battle Group, Updated Information concerning Element II Breakwater Pier Construction and Operation, Everett Naval Station, Snohomish, King and Pierce Counties, WA, Due: December 20, 1993, Contact: Don Morris (206) 396–5976.

Amended Notices

EIS No. 930166, Draft EIS, AFS, OR, Upper Wahoo Timber Sale and Road Construction, Implementation, Deer Creek Watershed, Wallowa-Whitman National Forest, Baker Ranger District, Baker County, OR, Due: July 6, 1993, Contact: Joanne Britton (503) 523–4476. Published FR 05–21–93—Environmental Analysis Process Terminated by Preparing Agency.

Dated: November 15, 1993.

William D. Dickerson,

Deputy Director, Office of Federal Activities.

[FR Doc. 93–28528 Filed 11–18–93; 8:45 am]

BILLING CODE 6560–50–U

[FRL–4803–8]

Missouri; Adequacy Determination of State/Tribal Municipal Solid Waste Landfill Permit Program

AGENCY: Environmental Protection Agency.

ACTION: Notice of tentative determination on application of Missouri for full program adequacy determination, public hearing comment period.

SUMMARY: Section 4005(c)(1)(B) of the Resource Conservation and Recovery Act (RCRA,) as amended by the Hazardous and Solid Waste Amendments (HWSA) of 1984, requires States to develop and implement permit programs to ensure that municipal solid waste landfills (MSWLFs) which may receive hazardous household waste or small quantity generator waste will comply with the revised Federal MSWLF Criteria, 56 FR 50978–51119, also referred to as 40 CFR part 258. RCRA section 4004(c)(1)(C) requires the Environmental Protection Agency (EPA) to determine whether States have adequate "permit" programs for MSWLFs, but does not mandate issuance of a rule for such determinations. EPA has drafted and is in the process of proposing a State/Tribal Implementation Rule (STIR) that will provide procedures by which EPA will approve, or partially approve, State/Tribal landfill permit programs. The Agency intends to approve adequate State/Tribal MSWLF permit programs as applications are submitted. Thus, these approvals are not dependent on final promulgation of the STIR. Prior to promulgation of the STIR, adequacy determinations will be based on the statutory authorities and requirements. In addition, State/Tribes may use the

draft STIR as an aid in interpreting these requirements. The Agency believes that early approvals have an important benefit. Approved State/Tribal permit programs provide for interaction between the State/Tribe and the owner/operator regarding site-specific permit conditions. Only those owners/operators located in State/Tribes with approved permit programs can use the site specific flexibility provided by 40 CFR part 258 to the extent the State/Tribal permit program allows such flexibility. EPA notes that regardless of the approval status of a State/Tribe and the permit status of any facility, 40 CFR part 258 will apply to all permitted and unpermitted MSWLF facilities.

Missouri applied for a determination of adequacy under section 4005 of RCRA. EPA has reviewed Missouri's MSWLF application and made a tentative determination that all portions of Missouri's MSWLF permit program are adequate to ensure compliance with 40 CFR part 258. Missouri's application for program adequacy determination is available for public review and comment.

Although RCRA does not require EPA to hold a public hearing on a determination to approve any State/Tribe's MSWLF program, the Region has tentatively scheduled a public hearing on this determination. If a sufficient number of people express interest in participating in a hearing by writing the Region or calling the contact given below by December 20, 1993, the Region will hold a hearing on the date given below in the "DATES" section. The Region will notify all persons who submit comments on this notice if it decides to hold the hearing. In addition, anyone who wishes to learn whether the hearing will be held may call the person listed in the "CONTACTS" section.

DATES: All comments on Missouri's application for a determination of adequacy must be received by the close of business on December 20, 1993, or, if a public hearing is scheduled, at the close of the public hearing. If the Region holds a public hearing, it will be held on January 4, 1994, at 1:30 p.m., at the Harry S. Truman State Office Building, room 492, 301 West High Street, Jefferson, City, Missouri. Representatives of the State of Missouri will participate in the public hearing held by EPA on this subject.

ADDRESSES: Written comments should be sent to Ms. Altheà M. Moses, Mail Code WSTM/RCRA/STPG, EPA Region VII, 726 Minnesota Avenue, Kansas City, Kansas 66101.

Copies of Missouri's application for adequacy determination are available from 8 a.m. to 4:30 p.m. at the following addresses for inspection and copying: Missouri State Information Center, 600 West Main, Jefferson City, Missouri 65102, Attn: Mr. Harold T. Morton, telephone 314–751–5401; and U.S. EPA Region VII Library, 726 Minnesota Avenue, Kansas City, Kansas 66101, telephone 913–551–7000.

FOR FURTHER INFORMATION CONTACT: EPA Region VII, 726 Minnesota Avenue, Kansas City, Kansas 66101, Attn: Ms. Altheà M. Moses, Mail Code WSTM/RCRA/STPG, telephone 913–551–7055.

SUPPLEMENTARY INFORMATION:

A. Background

On October 9, 1991, EPA promulgated 40 CFR part 258. Subtitle D of RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), requires States to develop permitting programs to ensure that MSWLFs comply with 40 CFR part 258. Subtitle D also requires in section 4005 that EPA determine the adequacy of State municipal solid waste landfill permit programs to ensure that facilities comply with 40 CFR part 258. To fulfill this requirement, the Agency has drafted and is in the process of proposing a State/Tribal Implementation Rule (STIR). The rule will specify the requirements which State/Tribal programs must satisfy to be determined adequate.

EPA intends to approve State/Tribe MSWLF permit programs prior to the promulgation of STIR. EPA interprets the requirements for the States or Tribes to develop "adequate" programs for permits or other forms of prior approval to impose several minimum requirements. First, each State/Tribe must have enforceable standards for new and existing MSWLFs that are technically comparable to 40 CFR part 258. Next, the State/Tribe must have the authority to issue a permit or other notice of approval to all new and existing MSWLFs in its jurisdiction. The State/Tribe also must provide for public participation in permit issuance and enforcement as required in section 7004(b) of RCRA. Finally, EPA believes that the State/Tribe must show that it has sufficient compliance monitoring and enforcement authorities to take specific action against any owner or operator that fails to comply with an approved MSWLF program. EPA Regions will determine whether a State/Tribe has submitted an "Adequate" program based on the interpretation outlined above. EPA plans to provide more specific criteria for evaluation when it proposes the State/Tribal Implementation Rule. EPA expects States/Tribes to meet all of these requirements for all elements of a MSWLF program before it gives full approval to a MSWLF program.

B. The State of Missouri

On September 17, 1993, Missouri submitted an application for adequacy determination. EPA reviewed Missouri's application and tentatively determined that all portions of the Missouri Subtitle D program will ensure compliance with 40 CFR part 258.

The public may submit written comments on EPA's tentative determination until December 20, 1993, or, if a public hearing occurs, until the conclusion of the public hearing. Copies of Missouri's application are available for inspection and copying at the locations indicated in the "ADDRESSES" section of this notice.

Region VII will hold a public hearing, if significant requests are received within 30 days of the date of publication of this notice, on its tentative decision on January 4, 1994, at 1:30 p.m. at Harry S. Truman State Office Building, room 492, 301 West High Street, Jefferson City, Missouri.

The State of Missouri recognized the advantage to landfill owners and operators of having only one set of regulations with which to comply. Therefore, in order to have State regulations which Missouri believes to be consistent with 40 CFR part 258 in place on the initial effective date of 40 CFR part 258, Missouri placed emergency regulation, 10 Code of State Regulations (CSR) 80, in effect from October 9, 1993 through February 6, 1994. The emergency regulations are in effect during the rule-making process for the final rule, 10 CSR 80, which is expected to be final by January 31, 1993. The emergency regulations were initiated in order that municipal solid waste landfills in Missouri need only comply with one set of regulations which will render them technically in compliance with both state and Federal regulations.

EPA will consider all public comments on its tentative determination. Issues raised by those comments may be the basis for a determination of inadequacy for Missouri's program. EPA will make a final decision on whether or not to approve Missouri's program by January 31, 1994 and will give notice of it in the **Federal Register**. The notice will include a summary of the reasons for the final determination and a response to all significant comments.

Section 4005(a) of RCRA provides that citizens may use the citizen suit provisions of section 7002 of RCRA to

enforce 40 CFR part 258 independent of any State/Tribal enforcement program. As EPA explained in the preamble to 40 CFR part 258, EPA expects that any owner or operator complying with provisions in a State/Tribal program approved by EPA should be considered to be in compliance with the Federal Criteria. See 56 FR 50978, 50995 (October 9, 1991).

Compliance With Executive Order 12866

The Office of Management and Budget has exempted this notice from the requirements of section 6 of Executive Order 12866.

Certification Under The Regulatory Flexibility Act

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this approval will not have a significant economic impact on a substantial number of small entities. It does not impose any new burdens on small entities. This notice, therefore, does not require a regulatory flexibility analysis.

Authority: This notice is issued under the authority of section 4005 of the Solid Waste Disposal Act as amended; 42 U.S.C. 6946.

Ronald R. Ritter,

Acting Regional Administrator.

[FR Doc. 93–28531 Filed 11–18–93; 8:45 am]

BILLING CODE 6560-50-F

FEDERAL DEPOSIT INSURANCE CORPORATION

Information Collection Submitted to OMB for Review

AGENCY: Federal Deposit Insurance Corporation.

ACTION: Notice of information collection submitted to OMB for review and approval under the Paperwork Reduction Act of 1980.

SUMMARY: In accordance with requirements of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35), the FDIC hereby gives notice that it has submitted to the Office of Management and Budget a request for OMB review of the information collection system described below.

Type of Review: New collection.

Title: Affordable Housing—Income Certification.

Form Number: None.

OMB Number: Not applicable.

Expiration Date of OMB Clearance: Not applicable.

Respondents: Potential purchasers or renters of properties in the FDIC's affordable housing program.

Frequency of Response: On occasion.

Number of Respondents: 1,500.

Number of Responses per Respondent: 1

Total Annual Responses: 1,500.

Average Number of Hours per Response: 1.

Total Annual Burden Hours: 1,500.

OMB Reviewer: Gary Waxman, (202) 395–7340, Office of Management and Budget, Paperwork Reduction Project 3064–0000, Washington, DC 20503.

FDIC Contact: Steven F. Hanft, (202) 898–3907, Office of the Executive Secretary, room F–400, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.

Comments: Comments on this collection of information are welcome and should be submitted before January 18, 1994.

ADDRESSES: A copy of the submission may be obtained by calling or writing the FDIC contact listed above. Comments regarding the submission should be addressed to both the OMB reviewer and the FDIC contact listed above.

SUPPLEMENTARY INFORMATION: Section 241 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) requires the FDIC to provide home ownership and rental housing opportunities for low-income families. This collection will permit the FDIC to determine the eligibility of applicants to participate in the affordable housing program.

Dated: November 16, 1993.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,

Executive Secretary.

[FR Doc. 93–28495 Filed 11–18–93; 8:45 am]

BILLING CODE 6714–01–M

FEDERAL EMERGENCY MANAGEMENT AGENCY

Public Information Collection Requirements Submitted to OMB for Review

ACTION: Notice.

SUMMARY: The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following public information collection requirements for review and clearance in accordance with the Paperwork Reduction Act of 1980, 44 U.S.C. chapter 35.

DATES: Comments on this information collection must be submitted on or before January 18, 1994.

ADDRESSES: Direct comments regarding the burden estimate or any aspect of this information collection, including suggestions for reducing this burden to: the FEMA Information Collections Clearance Officer at the address below; and to Gary Waxman, Office of Management and Budget, 3235 New Executive Office Building, Washington, DC 20503, (202) 395–7340, within 60 days of this notice.

FOR FURTHER INFORMATION CONTACT: Copies of the above information collection request and supporting documentation can be obtained by calling or writing Linda Borror, FEMA Information Collections Clearance Officer, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–2624.

Type: Revision of 3067–0225.

Title: Community Based Anti-Arson Program.

Abstract: The Community Based Anti-Arson Program has been developed to provide grants to community based organizations (CBO's) interested in mitigating the arson problem in their local jurisdictions. The program is administered by the U.S. Fire Administration, FEMA. The data collection requirements of the program include the application for a grant, quarterly reporting on approved projects, and quarterly evaluation of each CBO. The data is used to evaluate the effectiveness of the program and the need for continued funding, and to report to Congress when requested.

Type of Respondents: Non-profit institutions.

Estimate of Total Annual Reporting and Recordkeeping Burden: 530 hours.

Number of Respondents: 30.

Estimated Average Burden Time per Response: 1.33 hours.

Frequency of Response: Annually, Quarterly.

Dated: November 12, 1993.

Wesley C. Moore,

Director, Office of Administrative Support.

[FR Doc. 93–28492 Filed 11–18–93; 8:45 am]

BILLING CODE 6718–01–M

FEDERAL MARITIME COMMISSION

[Petition Nos. P90–93, P91–93, P92–93]

World Tariff Services Inc., et al.; Petition for Temporary Exemption From Electronic Tariff Filing Requirements

In the matter of Petition of World Tariff Services, Inc. on behalf of Frontier Liner Services, Inc., Petition of Lalandia, Incorporated on behalf of Antilles Freight Corp., Petition of Effective Tariff Management Corp.

Notice is hereby given of the filing of petitions by the above-named

petitioners, pursuant to 46 CFR 514.8(a), for temporary exemption from electronic tariff filing requirements of the Commission's ATFI System.

To facilitate thorough consideration of the petitions, interested persons are requested to reply to the petitions no later than November 26, 1993. Replies shall be directed to the Secretary, Federal Maritime Commission, Washington, DC 20573–0001, shall consist of an original and 15 copies, and shall be served as follows: P90–93—Mr. Robert Hadow, Director, World Tariff Services, Inc., 14 Commerce Drive, Cranford, NJ 07016; P91–93—Mr. Peter Sorensen, President, Lalandia, Incorporated, 123 N.W. 13th Street, Suite 313, Boca Raton, Florida 33432–1624; and P92–93—Ms. Tanga S. FitzGibbon, Executive Vice President, Effective Tariff Management Corp., 4000 Mitchellville Road, Suite 326–B, Bowie, Maryland 20716.

Copies of the petitions are available for examination at the Washington, DC office of the Secretary of the Commission, 800 N. Capitol Street, NW., room 1046.

Joseph C. Polking,

Secretary.

[FR Doc. 93–28493 Filed 11–18–93; 8:45 am]

BILLING CODE 6730–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 90F–0443]

Hoechst Celanese Corp.; Filing of Food Additive Petition; Amendment

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is amending the filing notice for a food additive petition filed by Hoechst Celanese Corp., to indicate that the petitioner has requested that the food additive regulations be amended to provide for the safe use of acesulfame potassium as a nonnutritive sweetener in baked goods and baking mixes, and also in icings, frostings, toppings, and fillings for baked goods. The previous filing notice indicated that the petitioner's request was for use of the additive in baked goods and baking mixes.

DATES: Written comments on the petitioner's environmental assessment by December 20, 1993.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Patricia A. Hansen, Center for Food Safety and Applied Nutrition (HFS–206), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–254–9523.

SUPPLEMENTARY INFORMATION: In a notice published in the **Federal Register** of October 30, 1990 (55 FR 45657), FDA announced that a food additive petition (FAP 0A4225) had been filed by Hoechst Celanese Corp., Route 202–206 North, Somerville, NJ 08876. In the notice of filing, FDA announced that the petitioner had proposed that the food additive regulations in § 172.800 *Acesulfame potassium* (21 CFR 172.800) be amended to provide for the safe use of acesulfame potassium in baked goods and baking mixes. The petition was filed under section 409 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 348).

Upon further review of the petition, the agency notes that the petitioner had also requested that the use of acesulfame potassium be permitted in icings, frostings, toppings, and fillings for baked goods. This additional portion of the petitioner's request was inadvertently omitted from the original filing notice.

Therefore, FDA is amending the filing notice of October 30, 1990, to state that the petitioner has proposed that § 172.800 *Acesulfame potassium* be amended to provide for the safe use of acesulfame potassium as a nonnutritive sweetener in baked goods and baking mixes, and in icings, frostings, toppings, and fillings for baked goods.

The potential environmental impact of this action is being reviewed. To encourage public participation consistent with regulations promulgated under the National Environmental Policy Act (40 CFR 1501.4(b)), the agency is placing the environmental assessment submitted with the petition that is the subject of this notice on public display at the Dockets Management Branch (address above) for public review and comment. Interested persons may, on or before December 20, 1993, submit to the Dockets Management Branch (address above) written comments. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday. FDA will also place on public display any amendments to, or comments on, the petitioner's environmental assessment without further announcement in the **Federal Register**. If, based on its review, the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the **Federal Register** in accordance with 21 CFR 25.40(c).

Dated: November 9, 1993.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 93–28435 Filed 11–18–93; 8:45 am]

BILLING CODE 4160–01–F

[Docket No. 93F–0384]

National Aeronautics and Space Administration; Filing of Food Additive Petition

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that the National Aeronautics and Space Administration (NASA) has filed a petition proposing that the food additive regulations be amended to provide for the safe use of sources of radiation to process certain prepackaged meats for use by NASA in its space flight programs.

DATES: Written comments on the petitioner's environmental assessment by December 20, 1993.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Patricia A. Hansen, Center for Food Safety and Applied Nutrition (HFS–206), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–254–9523.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5), (21 U.S.C. 348(b)(5))), notice is given that a food additive petition (FAP 3M4394) has been filed by NASA, Lyndon B. Johnson Space Center, Houston, TX 77058. The petition proposes to amend the food additive regulations to provide for the safe use of sources of radiation to process prepackaged meats for use by NASA in its space flight programs. It is further

proposed that the packaging materials used in this application be exempt from the requirements of § 179.25(c), provided that their use is otherwise permitted by applicable regulations in parts 174 through 186 (21 CFR parts 174 through 186).

The potential environmental impact of this action is being reviewed. To encourage public participation consistent with regulations promulgated under the National Environmental Policy Act (40 CFR 1501.4(b)), the agency is placing the environmental assessment submitted with the petition that is the subject of this notice on public display at the Dockets Management Branch (address above) for public review and comment. Interested persons may, on or before December 20, 1993, submit to the Dockets Management Branch (address above) written comments. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday. FDA will also place on public display any amendments to, or comments on, the petitioner's environmental assessment without further announcement in the **Federal Register**. If, based on its review, the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the **Federal Register** in accordance with 21 CFR 25.40(c).

Dated: November 9, 1993.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 93–28472 Filed 11–18–93; 8:45 am]

BILLING CODE 4160-01-F

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Community Planning and Development

[Docket No. N–93–1917; FR–3350–N–58]

Federal Property Suitable as Facilities to Assist the Homeless

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Notice.

SUMMARY: This Notice identifies unutilized, underutilized, excess, and surplus Federal property reviewed by HUD for suitability for possible use to assist the homeless.

EFFECTIVE DATE: November 19, 1993.

ADDRESS: For further information, contact Mark Johnston, Department of Housing and Urban Development, room 7262, 451 Seventh Street SW, Washington, DC 20410; telephone (202) 708–4300; TDD number for the hearing- and speech-impaired (202) 708–2565, (these telephone numbers are not toll-free), or call the toll-free Title V information line at 1–800–927–7588.

SUPPLEMENTARY INFORMATION: In accordance with the December 12, 1988 court order in *National Coalition for the Homeless* v. *Veterans Administration*, No. 88–2503–OG (D.D.C.), HUD publishes a Notice, on a weekly basis, identifying unutilized, underutilized, excess and surplus Federal buildings and real property that HUD has reviewed for suitability for use to assist the homeless. Today's Notice is for the purpose of announcing that no additional properties have been determined suitable or unsuitable this week.

Dated: November 12, 1993.

Jacquie M. Lawing,

Deputy Assistant Secretary for Economic Development.

[FR Doc. 93–28385 Filed 11–18–93; 8:45 am]

BILLING CODE 4210–29–F

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Availability of a Draft Habitat Conservation Plan, Environmental Assessment, and Receipt of an Application for an Incidental Take Permit for the Proposed Hell Canyon Quarry, Salt Lake City, Salt Lake County, UT

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability of documents.

SUMMARY: Allan Flandro (Applicant) has applied to the Fish and Wildlife Service (Service) for an incidental take permit pursuant to section 10(a) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The Applicant has been assigned Permit Number PRT–784336. The requested permit, which is for a period not to exceed 20 years, would authorize the incidental take of the endangered peregrine falcon (*Falco peregrinus anatum*). The proposed take would occur as a result of the operation of a quarry on a 30-acre tract at 1020 North Victory Road in Salt Lake City, Utah. This area has been a source of construction aggregates (i.e., limestone, sand, and gravel) since about 1900.

The Service has prepared an environmental assessment for the incidental take permit application. A determination of jeopardy to the species or a finding of no significant impact will not be made before 30 days from the date of publication of this notice. This notice is provided pursuant to section 10(c) of the Act and National Environmental Policy Act regulations (40 CFR 1506.6).

DATES: Written comments on the draft habitat conservation plan and draft environmental assessment should be received within 30 days of the date of this notice.

ADDRESSES: Persons wishing to review the application may obtain a copy by writing to the Field Supervisor, Utah Field Office, U.S. Fish and Wildlife Service, 2060 Administration Building, 1745 West 1700 South, Salt Lake City, Utah 84104, telephone (801) 975–3630, facsimile number (801) 975–3626. Persons wishing to review the draft environmental assessment may obtain a copy by contacting the Field Supervisor at the above address. Documents will be available by written request for public inspection, by appointment, during normal business hours at the Utah Field Office (7:30 a.m. to 4 p.m.). Written data or comments concerning the application and the draft environmental assessment should be submitted to the Field Supervisor, Utah State Office, at the above address. Please refer to Permit Number PRT–784336.

FOR FURTHER INFORMATION CONTACT: Robert Williams, Assistant Field Supervisor, at the above address or telephone 801/975–3630.

SUPPLEMENTARY INFORMATION: Section 9 of the Act prohibits the "taking" of any endangered species, including the peregrine falcon. However, the Service, under limited circumstances, may issue permits to take endangered wildlife species if such taking is incidental to, and not the purpose of, otherwise lawful activities. Regulations governing permits for endangered species are at 50 CFR 17.22.

Peregrine falcons first appeared in downtown Salt Lake City in 1984, the result of the peregrine falcon release program conducted by the Utah Division of Wildlife. A pair nested on the Hotel Utah from 1986 through 1989. In 1990 the pair relocated to a nearby quarry in Hell Canyon where they

nested on a cliff site from 1990–1993. This site is located less than 2 miles from the center of Salt Lake City and faces an industrial area that consists of oil refineries, gravel pits, and a railroad maintenance facility. Residential growth is taking place both south and east of the current nest location.

The Applicant plans to reactivate the 30-acre quarry currently being used by the peregrine falcons. Previous operations in the quarry created the vertical cliff wall where the nest is located. The proposed activity will destroy the cliff and the eyrie site. The Applicant also owns an addition 18.3 acres contiguous to the north end of Hell Canyon on which a smaller quarry is located. This site is about 1,200 feet from the present eyrie, higher in elevation, and about 1,100 feet from the planned excavation. The Applicant proposes to mitigate the incidental take of the peregrine nest site by attaching an artificial nesting box at the top of a cliff in this area. The nest box will be similar to the nesting boxes used by the pair in downtown Salt Lake City. The Applicant considered three alternatives but rejected them because they were not economically viable.

Dated: November 12, 1993.

John L. Spinks, Jr.,

Regional Director.

[FR Doc. 93–28465 Filed 11–18–93; 8:45 am]

BILLING CODE 4310–55–M

INTERSTATE COMMERCE COMMISSION

Procedural Change in Insurance Cancellation Process

AGENCY: Interstate Commerce Commission.

ACTION: Notice of a procedural change.

SUMMARY: The Commission will discontinue sending an interim letter, which is not required by statute, currently used in its insurance cancellation procedures for processing the revocation of authority of motor carriers, household goods freight forwarders, and property brokers that fail to renew their security in a timely manner. The interim letter is unnecessary because the holder is issued an initial 30-day notice and two subsequent 60-day notices to comply with 49 U.S.C. 10925. The objective of the revised procedure is to streamline the insurance cancellation process and to enhance the use of limited Commission resources without affecting either the rights of present carriers, household goods freight forwarders or brokers, or the regulations prescribed by the Commission.

This minor change in our insurance cancellation process is strictly procedural and does not involve any change of the Commission's regulations. Therefore, comments are not being sought.

EFFECTIVE DATE: Procedural change will be effective December 20, 1993.

FOR FURTHER INFORMATION CONTACT: Charles E. Wagner, (202) 927- 5530, or John W. Fristoe, (202) 927–5520. Assistance for the hearing impaired is available through TDD services, (202) 927 5721.

SUPPLEMENTARY INFORMATION: Subsections (b) and (c) of 49 U.S.C. 10925 provide for the revocation of a motor carrier, household goods freight forwarder, or broker's authority within a period of not less than 30 days from the issuance of an order compelling compliance, where it is found that the holder of the authority has willfully failed to comply with a regulation or Commission order. Under the Commission's current insurance cancellation process, when the Commission receives a 30-day advance notice from an insurer canceling the insurance of a carrier, household good freight forwarder, or broker's security:

(1) The agency immediately issues a letter, stating "in 30 days revocation proceedings will begin unless evidence of replacement insurance is filed with the Commission;"

(2) Approximately 14 days following the initial 30-day letter, if evidence of replacement insurance is not filed, the agency issues a second letter (14-day letter) reiterating the date and intent of the initial letter;

(3) Unless the agency receives notification that the holder's insurance or security is being renewed by the end of the 30-day period and evidence of such insurance is filed, the agency institutes revocation proceedings (1st decision);

(4) Enforcement action is taken after the 30-day period to prevent the holder from operating unless the holder signs a voluntary revocation form and/or a consent agreement promising not to operate.

(5) The first decision requires compliance within 60 days;

(6) After 60 days, if the agency has not received notification of renewal, a second decision is issued and a second 60-day compliance requirement period is given; and

(7) If the agency has not received notification of insurance at the end of the second 60-day period, the authority stands revoked.

The interim letter is not required by statute and does not provide any new or additional information. Therefore, to conserve agency resources it is being discontinued.

Authority: 49 U.S.C. 10925, 10927 and 49 CFR Part 1043.

Decided: November 10, 1993.

By the Commission, Chairman McDonald, Vice Chairman Simmons, Commissioners Phillips, Philbin, and Walden.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–28522 Filed 11–18–93; 8:45 am]

BILLING CODE 7035–01–P

[Finance Docket No. 32310]

The Alabama Great Southern Railroad Co.—Purchase of Line—Southrail Corp.

AGENCY: Interstate Commerce Commission.

ACTION: Notice of exemption.

SUMMARY: The Commission, under 49 U.S.C. 10505, exempts from the prior approval requirements of 49 U.S.C. 11343 the purchase and operation by The Alabama Great Southern Railroad Company of a 4.43-mile line of railroad of Southrail Corporation extending from Milepost GG–110.77 to Milepost GG–115.2 in Laurel, Jones County, Mississippi, subject to standard labor protective conditions.

DATES: The exemption is effective on December 19, 1993. Petitions to stay must be filed by November 29, 1993. Petitions to reopen must be filed by December 9, 1993.

ADDRESSES: Send pleading referring to Finance Docket No. 32310 to: (1) Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, D.C. 20423; and (2) Petitioner's representatives, Robert J. Cooney, Senior General Attorney, Norfolk Southern Corporation, 3 Commercial Place, Norfolk, Virginia 23510–2191 and Laurence R. Latourette, Preston Gates Ellis & Rouvelas Meeds, Suite 500, 1735 New York Avenue, NW, Washington, DC 20006–4759.

FOR FURTHER INFORMATION CONTACT: Richard B. Felder (202) 927–5610. [TDD for hearing impaired: (202) 927–5721.]

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision, write to, call, or pick up in person from Dynamic Concepts, Inc., room 2229, Interstate Commerce Commission Building,

Washington, DC 20423. Telephone: (202) 289–4357/4359. [Assistance for the hearing impaired is available through TDD services (202) 927–5271.]

Decided: November 12, 1993.

By the Commission, Chairman McDonald, Vice Chairman Simmons, Commissioners Phillips, Philbin, and Walden.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–28524 Filed 11–18–93; 8:45 am]

BILLING CODE 7035–01–P

[Docket No. AB–55 (Sub-No. 464X)]

CSX Transportation, Inc.—Abandonment Exemption—In Vermillion and Vigo Counties, IN

AGENCY: Interstate Commerce Commission.

ACTION: Notice of exemption.

SUMMARY: The Commission exempts from the prior approval requirements of 49 U.S.C. 10903–04 the abandonment by CSX Transportation, Inc., of a 8.52-mile rail line between milepost ZB–0.00 at Clinton and the end of the line at milepost ZB–8.52 near Universal, in Vermillion and Vigo Counties, IN, subject to interim trail use/rail banking, public use, and standard labor protective conditions.

DATES: The exemption will be effective on December 19, 1993, unless a formal expression of intent to file an offer of financial assistance is filed. Formal expressions of intent to file an offer of financial assistance under 49 CFR 1152.27(c)(2)[1] must be filed by November 29, 1993; petitions to stay must be filed by December 6, 1993; requests for a public use condition must be filed by December 9, 1993; and petitions to reopen must be filed by December 14, 1993.

ADDRESSES: Send pleadings referring to Docket No. AB–55 (Sub-No. 464X) to (1) Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423, and (2) Charles M. Rosenberger, 500 Water Street, Jacksonville, FL 32202.

FOR FURTHER INFORMATION CONTACT: Richard B. Felder (202) 927–5610. [TDD for hearing impaired: (202) 927–5721.]

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision, write to, call, or pick up in person from Dynamic Concepts, Inc., room 2229, Interstate Commerce Commission Building, Washington, DC 20423. Telephone: (202) 289–4357/4359. [Assistance for the hearing impaired is available through TDD services (202) 927–5271.]

Decided: October 26, 1993.

By the Commission, Chairman McDonald, Vice Chairman Simmons, Commissioners Phillips, Philbin, and Walden.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–28525 Filed 11–18–93; 8:45 am]

BILLING CODE 7035–01–P

[Docket No. AB–290; Sub-No. 135X]

Norfolk And Western Railway Co.—Abandonment Exemption—In Wyoming County, WV

Norfolk and Western Railway Co. has filed a notice of exemption under 49 CFR part 1152 subpart F—Exempt Abandonments to abandon its 1.01-mile line of railroad between milepost MY–0.00 at Milam Junction and milepost MY–1.01 at Catherine, in Wyoming County, WV.

Applicant has certified that: (1) No local traffic has moved over the line for at least two years; (2) there is no overhead traffic on the line; (3) no formal complaint filed by a user of rail service on the line (or a State or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Commission or with any U.S. District Court or has been decided in favor of the complainant within the 2-year period; and (4) the requirements at 49 CFR 1105.7 (service of environmental report on agencies); 49 CFR 1105.8 (service of historic report on State Historic Preservation Officer); 49 CFR 1105.12 (newspaper publication); and 49 CFR 1152.50(d)(1) (notice to governmental agencies) have been met.

As a condition to this exemption, any employee affected by the abandonment shall be protected under *Oregon Short Line R. Co.—Abandonment—Goshen*, 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10505(d) must be filed.

Provided no formal expression of intent to file an offer of financial assistance (OFA) has been received, this exemption will be effective on December 19, 1993, unless stayed pending reconsideration. Petitions to stay that do not involve environmental issues,[1] formal expressions of intent to file an OFA under 49 CFR 1152.27(c)(2),[2] and trail use/rail banking requests under 49 CFR 1152.29[3] must be filed by November 29, 1993. Petitions to reopen or requests for public use conditions under 49 CFR 1152.28 must be filed by December 9, 1993, with: Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423.

A copy of any petition filed with the Commission should be sent to applicant's representative: James R. Paschall, Norfolk Southern Corporation, Three Commercial Place, Norfolk, VA 23510.

If the notice of exemption contains false or misleading information, use of the exemption is void ab initio.

Applicant has filed an environmental report which addresses the abandonment's effects, if any, on the environment and historic resources. The Section of Energy and Environment (SEE) will issue an environmental assessment (EA) by November 24, 1993. Interested persons may obtain a copy of the EA from SEE by writing to it (room 3219, Interstate Commerce Commission, Washington, DC 20423) or by calling Elaine Kaiser, Chief of SEE, at (202) 927–6248. Comments on environmental and historic preservation matters must be filed within 15 days after the EA becomes available to the public.

Environmental, historic preservation, public use, or trail use/rail banking conditions will be imposed, where appropriate, in a subsequent decision.

Decided: November 12, 1993.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–28526 Filed 11–18–93; 8:45 am]

BILLING CODE 7035–01–P

[Ex Parte No. 519]

National Grain Car Supply—Conference of Interested Parties

AGENCY: Interstate Commerce Commission.

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[1] See *Exempt. of Rail Abandonment—Offers of Finan. Assist.*, 4 I.C.C.2d 164 (1987).

[1] A stay will be routinely issued by the Commission in those proceedings where an informed decision on environmental issues (whether raised by a party or by the Commission's Section of Energy and Environment in its independent investigation) cannot be made prior to the effective date of the notice of exemption. *See Exemption of Out-of-Service Rail Lines*, 5 I.C.C.2d 377 (1989). Any entity seeking a stay involving environmental concerns is encouraged to file its request as soon as possible in order to permit this Commission to review and act on the request before the effective date of this exemption.

[2] *See Exempt. of Rail Abandonment—Offers of Finan. Assist.*, 4 I.C.C.2d 164 (1987).

[3] The Commission will accept a late-filed trail use statement as long as it retains jurisdiction to do so.

ACTION: Institution of proceeding.

SUMMARY: The Commission is instituting a proceeding to gather information from railroads, grain shippers, rail car owners, and other interested parties regarding the supply of rail cars for the transportation of grain, and to provide a forum for discussion of any problems which may exist among directly affected parties. It is intended that the Conference will lead to a more complete understanding of the grain car supply situation by all concerned, including the Commission, and that it will assist the parties in resolving any problems that may exist. Vice-Chairman J.J. Simmons, III, will preside over the Conference and all related meetings.

DATES: Notice of intent to participate in the Conference, which it is anticipated will be held early in 1994, should be filed within 10 days of publication of this Notice. A Docket Management Conference, to be presided over by Vice-Chairman Simmons, will be held on December 21, 1993.

FOR FURTHER INFORMATION CONTACT: Ricky L. Crawford, Office of Vice-Chairman Simmons: (202) 927–6057; TDD for hearing impaired: (202) 927–5721.

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision served this date. To obtain a copy of the full decision, write to, call, or pick up in person from: Office of the Secretary, room 2215, Interstate Commerce Commission, Washington, DC 20423. Telephone: (202) 927–7428 [Assistance for the hearing impaired is available through TDD services (202) 927–5721).]

I initially conclude that this action will not significantly affect either the quality of the human environment or the conservation of energy resources.

I also initially conclude that the holding of this Conference will not have a significant economic impact on a substantial number of small entities. The purpose of this action is simply to provide, to all those desiring voluntarily to participate, a forum for assembling information about, and discussion of, any problems associated with the car supply for rail transportation of grain. No substantive regulatory decisions are contemplated. Accordingly, the economic impact on small entities, if any, is not likely to be significant within the meaning of the Regulatory Flexibility Act.

Authority: 49 U.S.C. 10321 and 49 CFR 1011.4(b)(1).

Decided: November 15, 1993.

By the Commission, Chairman Gail C. McDonald.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–28523 Filed 11–18–93; 8:45 am]

BILLING CODE 7035–01–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Importer of Controlled Substances; Registration

By Notice dated May 19, 1993, and published in the **Federal Register** on May 26, 1993, (58 FR 30184), Roberts Laboratories Inc., Meridan Center III, 6 Industrial Way West, Eatontown, New Jersey 07724, made application to the Drug Enforcement Administration to be registered as an importer of Propiram (9649) a basic class of controlled substance listed in Schedule I.

No comments or objections have been received. Therefore, pursuant to section 1008(a) of the Controlled Substances Import and Export Act and in accordance with title 21, Code of Federal Regulations § 1311.42, the above firm is granted registration as an importer of the basic class of controlled substance listed above.

Dated: November 9, 1993.

Gene R. Haislip,

Director, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 93–28451 Filed 11–10–93; 8:45 am]

BILLING CODE 4410–09–M

DEPARTMENT OF LABOR

Bureau of Labor Statistics

Labor Research Advisory Council; Notice of Meetings and Agenda

The Fall meetings of committees of the Labor Research Advisory Council will be held on November 30, December 7 and 8, 1993. All of the meetings will be held in the Conference Center of the Postal Square Building (PSB), 2 Massachusetts Avenue NE., Washington, DC.

The Labor Research Advisory Council and its committees advise the Bureau of Labor Statistics with respect to technical matters associated with the Bureau's programs. Membership consists of union research directors and staff members. The schedule and agenda of the meetings are as follows: Tuesday, November 30, 1993

9:30 a.m.—Committee on Wages and Industrial Relations, Rooms 9 and 10, PSB

1. Review of activities in progress
2. Preview of summary of fast food restaurant surveys
3. Summary of report on Occupational Compensation Survey Program benefits model
4. Employer-provided parental leave
5. Update on training subcommittee

1 p.m—Committee on Occupational Safety and Health Statistics—Rooms 9 and 10, PSB

1. 1992 Survey of Occupational Injuries and Illnesses
2. Lost workday measures
3. Table formats for worker demographic and case characteristics data
4. Availability of State data
5. Department of Labor report to House Appropriations Committee on data needs; Title VIII, OSHA Reform Act (proposed)
6. 1992 Census of Fatal Occupational Injuries—availability of State data
7. Other business

Tuesday, December 7, 1993

9:30 a.m.—Committee on Employment and Unemployment Statistics—Rooms 9 and 10, PSB

1. Overview of Office of Employment and Unemployment Statistics developments
2. Current Population Survey Redesign
3. Employment in foreign-owned establishments: findings and program plans
4. Occupational experience of unemployed during the recent recession and recovery

Wednesday, December 8, 1993

10 a.m.—Committee on Prices and Living Conditions Rooms 9 and 10, PSB

1. Status Reports
   a. Consumer Prices
   b. Producer Prices
   c. Internal Prices
2. Other business

1 p.m.—Committee on Productivity, Technology and Growth Committee on Foreign Labor Statistics Rooms 9 and 10, PSB

1. Briefing on the new BLS 1992–2005 projections
2. Discussion on the uses made of BLS productivity data:
   —for major sectors
   —for industries
3. Report on BLS international technical assistance activities
4. BLS work on international comparisons of Gross Domestic

Product per capita and per employed person.

The meetings are open to the public. Persons planning to attend these meetings as observers may want to contact Wilhelmina Abner on (Area Code 202) 606–5904.

Signed at Washington, DC, this 12th day of November 1993.

Katharine G. Abraham,

Commissioner.

[FR Doc. 93–28505 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-24-M

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor are issued in accordance with applicable law and are based on the information obtained by the Department of Labor from its study of local wage conditions and data made available from other sources. They specify the basic hourly wage rates and fringe benefits which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of a similar character and in the localities specified therein.

The determinations in these decisions of prevailing rates and fringe benefits have been made in accordance with 29 CFR part 1, by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR part 1, Appendix, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act. The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public comment procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in the effective date as prescribed in that section, because the necessity to issue current construction industry wage determinations frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions, and modifications and supersedes decisions thereto, contain no expiration dates and are effective from their date of notice in the **Federal Register**, or on the date written notice is received by the agency, whichever is earlier. These decisions are to be used in accordance with the provisions of 29 CFR parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR part 5. The wage rates and fringe benefits, notice of which is published herein, and which are contained in the Government Printing Office (GPO) document entitled "General Wage Determinations Issued Under The Davis-Bacon And Related Acts," shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

Any person, organization, or governmental agency having an interest in the rates determined as prevailing is encouraged to submit wage rate and fringe benefit information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Division of Wage Determinations, 200 Constitution Avenue, NW., room S–3014, Washington, DC 20210.

New General Wage Determination Decisions

The numbers of the decisions added to the Government Printing Office document entitled "General Wage Determinations Issued Under the Davis-Bacon and Related Acts" are listed by Volume and State.

Volume I

Virginia
- VA930090 (Nov. 19, 1993)
- VA930091 (Nov. 19, 1993)
- VA930092 (Nov. 19, 1993)
- VA930093 (Nov. 19, 1993)
- VA930094 (Nov. 19, 1993)
- VA930095 (Nov. 19, 1993)
- VA930096 (Nov. 19, 1993)
- VA930097 (Nov. 19, 1993)
- VA930098 (Nov. 19, 1993)
- VA930099 (Nov. 19, 1993)
- VA930100 (Nov. 19, 1993)
- VA930101 (Nov. 19, 1993)
- VA930102 (Nov. 19, 1993)

Volume II

Wisconsin
- W1930028 (Nov. 19, 1993)

Modification to General Wage Determination Decisions

The number of decisions listed in the Government Printing Office document entitled "General Wage Determinations Issued Under the Davis—Bacon and Related Acts" being modified are listed by Volume and State. Dates of publication in the **Federal Register** are in parentheses following the decisions being modified.

Volume I

Connecticut
- CT930001 (Feb. 19, 1993)
- CT930003 (Feb. 19, 1993)
- CT930004 (Feb. 19, 1993)

District of Col.
- DC930001 (Feb. 19, 1993)

Georgia
- GA930003 (Feb. 19, 1993)
- GA930011 (Feb. 19, 1993)
- GA930021 (Feb. 19, 1993)
- GA930022 (Feb. 19, 1993)
- GA930031 (Feb. 19, 1993)
- GA930032 (Feb. 19, 1993)
- GA930033 (Feb. 19, 1993)
- GA930035 (Feb. 19, 1993)
- GA930040 (Feb. 19, 1993)
- GA930050 (June 4, 1993)
- GA930058 (June 4, 1993)
- GA930062 (June 4, 1993)
- GA930065 (June 4, 1993)
- GA930066 (June 4, 1993)
- GA930073 (June 4, 1993)

Hawaii
- HI930001 (Feb. 19, 1993)

Kentucky
- KY930001 (Feb. 19, 1993)
- KY930002 (Feb. 19, 1993)
- KY930003 (Feb. 19, 1993)
- KY930004 (Feb. 19, 1993)
- KY930006 (Feb. 19, 1993)
- KY930007 (Feb. 19, 1993)
- KY930025 (Feb. 19, 1993)
- KY930027 (Feb. 19, 1993)
- KY930028 (Feb. 19, 1993)
- KY930029 (Feb. 19, 1993)
- KY930035 (Feb. 19, 1993)

Massachusetts
- MA930001 (Feb. 19, 1993)
- MA930002 (Feb. 19, 1993)
- MA930003 (Feb. 19, 1993)
- MA930005 (Feb. 19, 1993)
- MA930007 (Feb. 19, 1993)
- MA930013 (Sept. 9, 1993)
- MA930014 (Sept. 9, 1993)
- MA930015 (Sept. 9, 1993)

New York
- NY930015 (Feb. 19, 1993)
- NY930018 (Feb. 19, 1993)

Pennsylvania
- PA930004 (Feb. 19, 1993)
- PA930005 (Feb. 19, 1993)
- PA930013 (Feb. 19, 1993)
- PA930025 (Feb. 19, 1993)

Virginia
- VA930001 (Feb. 19, 1993)
- VA930007 (Feb. 19, 1993)

VA930088 (Nov. 12, 1993)

Volume II

Iowa
IA930005 (Feb. 19, 1993)
IA930010 (Feb. 19, 1993)
Kansas
KS930012 (Feb. 19, 1993)
KS930047 (Oct. 22, 1993)
Michigan
MI930056 (Oct. 1, 1993)
Minnesota
MN930003 (Feb. 19, 1993)
MN930007 (Feb. 19, 1993)
MN930008 (Feb. 19, 1993)
MN930015 (Feb. 19, 1993)
New Mexico
NM930001 (Feb. 19, 1993)
NM930005 (Feb. 19, 1993)
Oklahoma
OK930020 (Feb. 19, 1993)
Texas
TX930007 (Feb. 19, 1993)
TX930074 (July 9, 1993)
Texas
TX930087 (Nov. 12, 1993)
Wisconsin
WI930003 (Feb. 19, 1993)
WI930017 (Feb. 19, 1993)

Volume III

California
CA930003 (Feb. 19, 1993)
CA930005 (Feb. 19, 1993)
CA930007 (Feb. 19, 1993)
CA930009 (June 11, 1993)
CA930010 (June 11, 1993)
CA930015 (June 11, 1993)
CA930026 (July 9, 1993)

General Wage Determination Publication

General wage determinations issued under the Davis-Bacon and related Acts, including those noted above, may be found in the Government Printing Office (GPO) document entitled "General Wage Determinations Issued Under The Davis-Bacon And Related Acts". This publication is available at each of the 50 Regional Government Depository Libraries and many of the 1,400 Government Depository Libraries across the country. Subscriptions may be purchased from: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 783–3238.

When ordering subscription(s), be sure to specify the State(s) of interest, since subscriptions may be order for any or all of the three separate volumes, arranged by State. Subscriptions include an annual edition (issued on or about January 1) which includes all current general wage determinations for the States covered by each volume. Throughout the remainder of the year, regular weekly updates will be distributed to subscribers.

Signed at Washington, DC, this 12th day of November 1993.

Alan L. Moss,

Director, Division of Wage Determinations.

[FR Doc. 93–28236 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-27-M

Employment and Training Administration

[TA–W–28, 832, et al.]

Chuska Energy Co., et al.; Revised Determinations on Reconsideration

In the matter of TA–W–28,832 Chuska Energy Co., Denver, Colorado, TA–W–28,833 Sunfield Energy Co., Denver, Colorado.

On October 27, 1993, the Department issued an Affirmative Determination Regarding Application for Reconsideration for former workers of Chuska Energy and Sunfield Energy companies in Denver, Colorado. The notice was published in the **Federal Register** on November 4, 1993 (58 FR 58879).

Counsel for the petitioners states that the Department did not address the worker separations which occurred in mid-1992, six months before the merger with Harken Energy Corporation.

The findings show that the workers at the Denver facility of Chuska Energy and Sunfield Energy performed exploration activities mainly for crude oil.

Crude oil and natural gas revenues for the subject firm decreased in 1992 compared to 1991.

U.S. aggregate imports of crude oil increased in 1992 compared to 1991.

Exploration and drilling activity in the crude oil and natural gas industry is particularly sensitive to the level of imports and changes in the price level of crude oil. The impact of crude oil imports and reduced price levels has resulted in sharply declining U.S. exploration and drilling activity.

In January 1993, Chuska Energy and its affiliate Sunfield Energy were acquired by Harken Energy Corporation whose workers are certified eligible under TA–W–28,484 and TA–W–28,485.

Conclusion

After careful review of the additional facts obtained on reconsideration, it is concluded that increased imports of articles like or directly competitive with crude oil and natural gas contributed importantly to the decline in sales and to the total or partial separation of workers at Chuska Energy Company and its affiliate, Sunfield Energy Company, both in Denver, Colorado. In accordance with the provisions of the Trade Act of 1974, I make the following revised determination:

All workers of Chuska Energy Company and Sunfield Energy Company, Denver, Colorado who became totally or partially separated from employment on or after June 10, 1992 and before January 1, 1993 are eligible to apply for adjustment assistance under section 223 of the Trade Act of 1974.

Signed at Washington, DC, this 9th day of November 1993.

Stephen A. Wandner,

Deputy Director, Office of Legislation & Actuarial Services, Unemployment Insurance Service.

[FR Doc. 93–28503 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-30-M

[TA–W–28,733, et al.]

Wang Laboratories, Inc.; Revised Determination on Reopening

In the matter of TA–W–28,733 INDUSTRIAL AVENUE PLANT, LOWELL, MA, TA–W–28,733A REGIONAL SUPPORT CENTER, DALLAS, TX, TA–W–28,733B PAWTUCKET BOULEVARD HQS, LOWELL, MA, TA–W–28,733C METHUEN, MA, TA–W–28,733D TEWKSBURY, MA.

On November 5, 1993, the Department, at the request of the company, reopened its investigation for workers and former workers of the subject firm. The initial investigation resulted in a certification for workers in Lowell, Massachusetts and Dallas, Texas. The certification notice was published in the **Federal Register** on October 29, 1993 (58 FR 58188).

New investigation findings on reopening show that Methuen and Tewksbury production was integrated with that of Lowell and that their sales and employment data was combined with Lowell's.

The findings show that worker separations occurred both at Methuen and Tewksbury in 1992 and in 1993. Both facilities experienced a reduction in orders from Lowell. The findings also show that Methuen produced the printed circuit boards (PCBs) for the computers produced at Lowell. The Tewksbury facility was a distribution and repair center.

Other findings show that Wang Laboratories has two locations in Lowell, Massachusetts—the Industrial Avenue and Pawtucket Boulevard sites both of which had worker separations in 1992 and in 1993. The termination date of October 7, 1993 is removed for the Massachusetts locations since worker separations continue to occur. The Dallas facility closed in April, 1993.

Conclusion

After careful consideration of the new facts obtained on reopening, it is concluded that increased imports of articles like or directly competitive with computers produced by Wang Laboratories, Inc., in Lowell, Massachusetts contributed importantly to the decline in sales and production and to the total or partial separation of workers at Lowell, Methuen, and Tewksbury, Massachusetts and Dallas, Texas.

In accordance with the provisions of the Trade Act of 1974, I make the following revised determination:

All workers and former workers of Wang Laboratories, Inc., at the Industrial Avenue plant and the Pawtucket Boulevard headquarters both in Lowell, Massachusetts; in Methuen, Massachusetts and Tewksbury, Massachusetts who became totally or partially separated from employment on or after May 21, 1992 are eligible to apply for adjustment assistance under section 223 of the Trade Act of 1974 and all former workers of the Regional Support Center of Wang Laboratories, Inc., in Dallas, Texas who became totally or partially separated from employment on or after May 21, 1992 and before October 7, 1993 are eligible to apply for adjustment assistance under section 223 of the Trade Act of 1974.

Signed at Washington, DC, this 8th day of November 1993.

Stephen A. Wandner,

Deputy Director, Office of Legislation & Actuarial Service, Unemployment Insurance Service.

[FR Doc. 93–28504 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-30-M

Mine Safety and Health Administration

Petitions for Modification

The following parties have filed petitions to modify the application of mandatory safety standards under section 101(c) of the Federal Mine Safety and Health Act of 1977.

1. Interstate Thermal Energy Conversion Corp. (ITEC)

[Docket No. M–93–298–C]

Interstate Thermal Energy Conversion Corporation (ITEC), P.O. Drawer 1187, Uniontown, Pennsylvania 15401 has filed a petition to modify the application of 30 CFR 75.380(d)(3) (escapeways; bituminous and lignite mines) to its Clyde Mine (I.D. No. 36–00967) located in Washington County, Pennsylvania. Due to deteriorating roof conditions in the 2 West Return Escapeway at intersections from #5 entry 5+55.30 to #2 entry 2+40.51 2 West Drain Entries and the overcast in Hawkins North air courses, the petition proposes to have an escapeway clearance height of 4 feet 6 inches instead of the required 5 feet. The petitioner states that mining equipment cannot be brought in to clean up the area due to the location and soft bottoms, that additional roof supports such as cribs, posts, and timbers have been installed in the return escapeway, and that clean up work which would have to be done by hand in order to remove the supports would be dangerous to the workers. In addition, the petitioner asserts that the proposed alternate method would not adversely affect the health or safety of the miners.

2. Clinchfield Coal Co.

[Docket No. M–93–299–C]

Clinchfield Coal Company, P.O. Box 4000, Lebanon, Virginia 24266 has filed a petition to modify the application of 30 CFR 75.1710–1(a) (canopies or cabs; self-propelled electric face equipment; installation requirements) to its Camp Branch No. 1 Mine (I.D. No. 44–00280) located in Dickenson County, Virginia. Due to seam and equipment heights, the petitioner proposes to operate Joy 21SC center-driven shuttle cars and 488 S & S scoops without canopies. The petitioner states that the use of canopies on the electric face equipment would result in a diminution of safety to the equipment operator.

3. Windsor Coal Co.

[Docket No. M–93–300–C]

Windsor Coal Company, P.O. Box 39, West Liberty, West Virginia 26074 has filed a petition to modify the application of 30 CFR 75.364(b) (1) & (2) (weekly examination) to its Windsor Mine (I.D. No. 46–01286) located in Brooke County, West Virginia. Due to deteriorating roof conditions in the East Mains from the #8 entry of 1 South to the Mouth of the East Mains of the return air course, the petitioner proposes to establish three check points at specific locations to monitor for methane and the quantity and quality of air entering the affected area on a weekly basis and record the test results in a book that would be kept on the surface. The petitioner asserts that the proposed alternate method would provide at least the same measure of protection as would the mandatory standard.

4. Levisa Coal, Inc.

[Docket No. M–93–301–C]

Levisa Coal, Inc., HC 65, Box 50, Regina, Kentucky 41559 has filed a petition to modify the application of 30 CFR 75.1710–1 (canopies or cabs; self-propelled electric face equipment; installation requirements) to its No. 3 Mine (I.D. No. 15–11276) located in Pike County, Kentucky. Due to descending grades and dips in the coal bed, the petitioner proposes to operate the four 21SC shuttle cars, three Joy miners, and Galis roof bolting machines without canopies. The petitioner states that the use of canopies on the electric face equipment would limit the operator's visibility and create a hazard to the equipment operator and other employees. As a result, the installation of canopies could be a contributing factor in any accidents that may arise.

Request for Comments

Persons interested in these petitions may furnish written comments. These comments must be filed with the Office of Standards, Regulations and Variances, Mine Safety and Health administration, room 627, 4015 Wilson Boulevard, Arlington, Virginia 22203. All comments must be postmarked or received in that office on or before December 20, 1993. Copies of these petitions are available for inspection at that address.

Dated: November 10, 1993.

Patricia W. Silvey,

Director, Office of Standards, Regulations and Variances.

[FR Doc. 93–28494 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-43-P

Occupational Safety and Health Administration

[Docket No. NRTL–1–88]

MET Laboratories, Inc., Notice of Expansion of Current Recognition

AGENCY: Occupational Safety and Health Administration, Department of Labor.

ACTION: Notice of Expansion of Current Recognition as a Nationally Recognized Testing Laboratory.

SUMMARY: This notice announces the Agency's final decision on the MET Laboratories, Inc. application for expansion of its recognition as a Nationally Recognized Testing Laboratory (NRTL) under 29 CFR 1910.7.

FOR FURTHER INFORMATION CONTACT:

Office of Variance Determination, NRTL Recognition Program, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue NW., Room N3653, Washington, DC 20210.

SUPPLEMENTARY INFORMATION:

Notice of Final Decision

MET Laboratories, Inc. (MET), (formerly MET Electrical Testing Company, Inc.), previously made application pursuant to section 6(b) of the Occupational Safety and health Act of 1970, (84 Stat. 1593, 29 U.S.C. 655), Secretary of Labor's Order No. 1–90 (55 FR 9033), and 29 CFR 1910.7, for recognition as a Nationally Recognized Testing Laboratory (see 53 FR 49258, 12/6/88), and was so recognized (see 54 FR 21136, 5/16/89).

MET initially applied for expansion of its current recognition as a Nationally Recognized Testing Laboratory for two test standards pursuant to 29 CFR 1910.7 which was granted as published in the **Federal Register** on June 7, 1990 (55 FR 23311–12). (See Exhibit 9.).

Subsequent to that, MET again applied for an expansion of its recognition for twelve standards pursuant to 29 CFR 1910.7 which was granted as published in the **Federal Register** on May 31, 1991 (56 *FR* 24845–46). (See Exhibit 12.).

Following both of these expansions, MET applied for an expansion of its recognition for additional three standards. [See **Federal Register** notice dated July 13, 1993 (58 *FR* 37752, Exhibit 13.)]

Notice is hereby given that MET's recognition as a Nationally Recognized Testing Laboratory has been expanded to include the three test standards (product categories) listed below.

Copies of all pertinent documents (Docket No. NRTL–1–88), are available for inspection and duplication at the Docket Office, Room N–2634, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue, NW., Washington, DC 20210. The address of the concerned laboratory is: MET Laboratories, Inc., 914 West Patapsco Avenue, Baltimore, Maryland 21230.

Final Decision and Order

Based upon the facts found as part of the MET Laboratories, Inc. original recognition, including details of necessary test equipment, procedures, and special apparatus or facilities needed, adequacy of staff, the application(s) and documentation submitted by the applicant (see Exhibit 14. A.), the OSHA staff finding including the original On-Site Review Report, and previous on-site audits, as well as the evaluation of the current request (see Exhibit 14. B.), OSHA finds that MET Laboratories, Inc. has met the requirements of 29 CFR 1910.7 for expansion of its present recognition to test and certify certain equipment or materials.

Pursuant to the authority in 29 CFR 1910.7, the MET Laboratories, Inc. recognition is hereby expanded to include the three additional test standards (product categories) cited below, subject to the conditions listed below. This recognition is limited to equipment or materials which, under 29 CFR part 1910, require testing, listing, labeling, approval, acceptance, or certification by a Nationally Recognized Testing Laboratory. This recognition is limited to the use of the following three additional test standards for the testing and certification of equipment or materials included within the scope of these standards.

MET has stated that these standards are used to test equipment or materials which can be used in environments under OSHA's jurisdiction, and OSHA has determined that they are appropriate within the meaning of 29 CFR 1910.7(c).

UL 763—Motor-Operated Commercial Food Preparing Machines
ANSI/UL 859—Personal Grooming Appliances
ANSI/UL 1409—Low-Voltage Video Products Without Cathode-Ray-Tube Displays

MET Laboratories, Inc., must also abide by the following conditions of this expansion of its recognition, in addition to those already required by 29 CFR 1910.7:

This recognition does not apply to any aspect of any program which is available only to qualified manufacturers and is based upon the NRTL's evaluation and accreditation of the manufacturer's quality assurance program;

The Occupational Safety and Health Administration shall be allowed access to MET's facilities and records for purposes of ascertaining continuing compliance with the terms of its recognition and to investigate as OSHA deems necessary;

If MET has reason to doubt the efficacy of any test standard it is using under this program, it shall promptly inform the test standard developing organization of this fact and provide that organization with appropriate relevant information upon which its concerns are based;

MET shall not engage in or permit others to engage in any misrepresentation of the scope or conditions of its recognition. As part of this condition, MET agrees that it will allow no representation that it is either a recognized or an accredited Nationally Recognized Testing Laboratory (NRTL) without clearly indicating the specific equipment or material to which this recognition is tied, or that its recognition is limited to certain products;

MET shall inform OSHA as soon as possible, in writing, of any change of ownership or key personnel, including details;

MET will continue to meet the requirements for recognition in all areas where it has been recognized; and

MET will always cooperate with OSHA to assure compliance with the letter as well as the spirit of its recognition and 29 CFR 1910.7.

EFFECTIVE DATE. This recognition will become effective on November 19, 1993, and will be valid until May 16, 1994, (a period of five years from the date of the original recognition, May 16, 1989), unless terminated prior to that date, in accordance with 29 CFR 1910.7.

Signed at Washington, DC this 5th day of November, 1993.

David C. Zeigler,

Acting Assistant Secretary.

[FR Doc. 93–28506 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-26-M

[Docket No. NRTL–3–92]

TUV Rheinland of North America, Inc.

AGENCY: Occupational Safety and Health Administration, Department of Labor.

ACTION: Notice of application for recognition as a Nationally Recognized Testing Laboratory, and preliminary finding.

SUMMARY: This notice announces the application of TUV Rheinland of North America for recognition as a Nationally Recognized Testing Laboratory (NRTL) under 29 CFR 1910.7, and presents the Agency's preliminary finding.

DATES: The last date for interested parties to submit comments is January 18, 1994.

ADDRESSES: Send comments to: NRTL Recognition Program, Office of Variance Determination, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue, 3NW., Room N3653, Washington, DC 20210.

FOR FURTHER INFORMATION CONTACT: NRTL Recognition Program, Office of Variance Determination, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue, NW., Room N3653, Washington, DC 20210.

SUPPLEMENTARY INFORMATION:

Notice of Application

Notice is hereby given that TUV Rheinland of North America, Inc. (TUV) has made application pursuant to section 6(b) of the Occupational Safety and Health Act of 1970, (84 Stat. 1593, 29 U.S.C. 655), Secretary of Labor's Order No. 1–90 (55 FR 9033), and 29 CFR 1910.7 for recognition as a Nationally Recognized Testing Laboratory.

The address of the laboratory covered by this application is: TUV Rheinland of North America, Inc., 12 Commerce Road, Newtown, Connecticut 06470.

Regarding the merits of the application, the applicant contends that it meets the requirements of 29 CFR 1910.7 for recognition to certify products in the areas of testing which it has specified.

TUV Rheinland of North America, Inc. believes that for each item of equipment or material to be certified, it has the capability (including proper testing equipment and facilities, trained staff, written testing procedures, and calibration and quality control programs) to perform testing and examination of equipment and materials for workplace safety purposes to determine conformance with appropriate test standards. Exhibit 2. A., Att. 10, Quality Manual, Rev. B, dated May 1991, has been revised several times since the submittal of the original application. The most recent revision of the Quality Manual, Exhibit 2. G., Rev. 1.0, dated 06–1993, contains sections dealing with organization; documentation control; equipment, testing and measuring; maintenance; calibration and checking; test methods and procedures; test records and reports; verification of results; quality records; and internal quality audits, among other items. The applicant also submitted a copy of its Procedure Manual, Exhibit 2. E., Att. 6, dated March 1992, including sections pertaining to complaints (PM 260) and follow-up procedures (PM 124). OSHA suggested (Exhibit 2. F.) other sections be added to the Quality Manual, which was subsequently done (see Exhibit 2. G.). The Procedure Manual (and the additional sections found in Exhibit 2. G.) includes, among other things, written procedures for those items covered in the Quality Manual, such as: Instrument calibration and checking; test records and reports; file construction, procedure, and review; internal quality audits; handling of samples; verification of results; first and follow-up factory inspections, and field audits.

TUV owns a 13,200 square foot building located in an industrial park. The laboratory moved to its present location in 1990. More than half of the floor space in the building is used for product testing, engineers' offices, and storage. The product testing laboratory includes some 1800 square feet of floor space. TUV states that it is its policy to maintain and monitor environmental conditions of the test area. Access to the test area is restricted to authorized TUV personnel, and all test equipment is maintained in such a manner as to protect them for deterioration. Further, in addition to the installation of a sprinkler system installed throughout the building, the applicant has a security and fire alarm system monitored by a contracted security service and the local police.

According to the applicant, TUV Rheinland of North America, Inc. is an independent testing laboratory. Further, it maintains that it is a 100% owned subsidiary of TUV Rheinland e.V., Cologne, Germany, and that the NRTL program will be independently carried out by TUV Rheinland of North America, Inc., only at its Newtown, Connecticut facility (see Exhibit 2. C., p 2 of cover letter, and Attachments 2, 3, and 4). According to a statement in Exhibit 2. E., Att. 5, TUV Rheinland of North America, Inc., was incorporated in the state of Delaware in 1983.

The applicant claims to maintain effective procedures for producing creditable findings or reports that are objective and without bias. The TUV Quality Manual, Example 2. G., Rev. 1.0, dated 06–1993, outlines operational procedures for all testing performed at the facility. It also contains pertinent information on maintenance and calibration of testing and measuring equipment.

TUV states that it maintains effective procedures for handling complaints and disputes under a fair and reasonable system. The Procedure Manual states that all complaints by clients and any interested parties, whether in writing or by phone, are to be handled by its Complaint Review Board in a timely manner.

The internal complaint procedure is outlined in this Manual.

The applicant maintains that it provides for the implementation of control procedures for identifying the listed and labeled equipment or materials, inspection of the production runs of such items as factories for product evaluation purposes to assure conformance with applicable test standards, and the conducting of field inspections to monitor and to assure the proper use of its identifying mark or labels on products. The applicant states that it has pertinent experience in third-party testing and certification inasmuch as it has been testing and certifying electrical products to EN 60 950/IEC 950 since that standard's inception. The UL 1950 test standard, for which TUV has requested accreditation from OSHA, was derived directly from this EN/IEC standard to achieve harmony in domestic and European safety requirements. TUV further states that it has over one thousand products "licensed" (certified) to these (EN 60 950/IEC 950) standards. As part of the EN 60 950/IEC 950 certification, TUV has performed services including plant inspections, authorization of identification label or mark application, follow-up inspections, and a publication of a list of tested/licensed equipment to the EN 60 950 standard. The applicant has also stated that it has applied and is awaiting final approval of its registered certification mark, and has enclosed a copy of what was submitted to the U.S. Patent and Trademark Office (see Ex. 2. E., and Att. 1). Appendix A of the Quality Manual in Exhibit 2. G. details the TUV Follow-Up Inspection Procedure (NRTL), including the required four unannounced follow-up inspections to be conducted annually. The latest version of the Quality Manual (Exhibit 2. G., Appendix A) also specifies a minimum annual random sampling of a unit in the field and specifies subjecting it to normal follow-up inspections at the Newtown facility (see Ex. 2. G.)

Background

TUV Rheinland of North America, Inc. maintains that it is a privately held Product Safety and Quality Assurance Testing firm with offices throughout the United States and Canada. However, only the Newtown facility will be involved in the NRTL program. TUV claims further that it is 100% owned by TUV Rheinland e.V. in Cologne, Germany. The only facility for which TUV has requested recognition is its North American Headquarters located in Newtown, Connecticut (see Exhibit 2. C., p 2 of cover letter, and Attachments 2, 3, and 4). TUV Rheinland of North America, Inc. is a U.S. corporation incorporated in the state of Delaware in 1983 (See Ex. 2. E., Att. 5).

TUV states that it has 12 employees at the laboratory site currently involved in testing and evaluation, all of whom are considered key personnel (Exhibit 2. E.). They include an Executive Vice President who is the senior manager responsible for the NRTL program; an Engineering (Technical) Manager responsible for NRTL activities at the

Connecticut facility; a Division Manager of QA Services responsible for ISO 9000 services and external quality assurance; a Manager of the Follow-Up Department responsible for NRTL activities of the program; a Lab Supervisor responsible for testing laboratory activities; a Senior Technician responsible for testing NRTL product submittals; two Senior Engineers (project engineer), and an additional Engineer responsible for evaluating NRTL products; a QA Administer who administers the follow-up program; a Follow-up Inspector for the NRTL program; and a QA Certification Officer responsible for compliance to TUV Rheinland internal quality assurance standards. Resumes are included in the application for all of these individuals (Example 2. E., Att. 2).

The applicant has also identified more than 60 pieces of test equipment it uses to perform the testing required by the standards. Test equipment is available in the laboratory to perform the testing specified in the standard for which recognition has been requested.

TUV Rheinland of North America, Inc., desires recognition for testing and certification of products when tested for compliance with the following test standard, which is appropriate within the meaning of 29 CFR 1910.7(c).

ANSI/UL 1950—Information Technology Equipment Including Electrical Business Equipment

Preliminary Finding

TUV Rheinland of North America, Inc., addressed all of the criteria which must be met for recognition as an NRTL in its initial application and in its supplemental correspondence. For example, the applicant submitted a list of its test equipment and instrumentation; a roster of its personnel including resumes of those in key positions and copies of position descriptions; copies of a typical test report, a factory inspection form and an inspection summary; a summary of its listing, labeling, and follow-up services; a statement of its independence as a testing laboratory; and a copy of its Quality Manual including a description of its documentation, calibration system, appeals procedure, recordkeeping and operational procedures, internal quality audits, first factory and follow-up factory inspections, and verification of results. Nine major areas were examined in depth during the on-site laboratory evaluation: facility; test equipment; calibration program; test and evaluation procedures; test reports; records; quality assurance program; follow-up listing program; and personnel evaluation: facility; test equipment; calibration program; test and evaluation procedures; test reports; records; quality assurance program; follow-up listing program; and personnel.

The discrepancies noted during the evaluation [Ex. 3. A.(1)] were adequately responded to prior to the preparation of the survey report and are included as attached to the survey report [Ex. 3. B. and C.].

With the preparation of the final report concerning the Newtown facility of TUV Rheinland of North America, Inc., the survey team was satisfied that the testing facility appeared to meet the necessary criteria required by 29 CFR 1910.7, and so noted this in the On-Site Review Report (Survey). (See Ex. 3. A.).

Following a review of the application file and the on-site survey report of the TUV Newtown facility, the NRTL Recognition Program staff concluded that the applicant appeared to have met the requirements for recognition as a Nationally Recognized Testing Laboratory and, therefore, recommended to the Assistant Secretary that the application be preliminarily approved.

Based upon a review of the completed application file and the recommendation of the staff, the Assistant Secretary has made a preliminary finding that the Newtown facility of TUV Rheinland of North America, Inc., can meet the requirements for recognition as set forth in 29 CFR 1910.7.

All interested members of the public are invited to supply detailed reasons and evidence supporting or challenging the sufficiency of the applicant's having met the requirements for recognition as a Nationally Recognized Testing Laboratory, as well as Appendix A, of 29 CFR 1910.7. Submission of pertinent written documents and exhibits shall be made no later than January 18, 1994 and must be addressed to the NRTL Recognition Program, Office of Variance Determination, Room N 3653, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue, NW., Washington, DC 20210. Copies of the TUV application, the laboratory survey report, and all submitted comments, as received, (Docket No. NRTL–3–92), are available for inspection and duplication at the Docket Office, room N 2634, Occupational Safety and Health Administration, U.S. Department of Labor, at the above address.

The Assistant Secretary's final decision on whether the applicant satisfies the requirements for recognition as an NRTL will be made on the basis of the entire record including the public submissions and any further proceedings that the Assistant Secretary may consider appropriate in accordance with Appendix A of § 1910.7.

Signed at Washington, DC, this 5th day of November, 1993.

David C. Zeigler,

Acting Assistant Secretary.

[FR Doc. 93–28507 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-26-M

Pension and Welfare Benefits Administration

[Application Numbers D–9395, D–9396]

Proposed Amendment to Prohibited Transaction Exemption 93–33 (PTE 93–33) for the Receipt of Certain Services by Individuals for Whose Benefit Individual Retirement Accounts or Retirement Plans for Self-Employed Individuals Have Been Established or Maintained

AGENCY: Pension and Welfare Benefits Administration, U.S. Department of Labor.

ACTION: Notice of proposed amendment to PTE 93–33.

SUMMARY: This document contains a notice of pendency before the Department of Labor of a proposed amendment to PTE 93–33. PTE 93–33 is a class exemption that permits the receipt of services at reduced or no cost by an individual for whose benefit an individual retirement account (IRA) or, if self-employed, a Keogh Plan, is established or maintained, or by members of his or her family, from a bank, provided the conditions of the exemption are met. The proposed amendment, if adopted, would affect individuals with a beneficial interest in the IRAs and Keogh Plans who receive such services as well as the banks that provide such services.

DATES: If adopted, the proposed amendment would be effective as of May 11, 1993, the effective date of PTE 93–33. Written comments and requests for a public hearing should be received by the Department on or before January 3, 1994.

ADDRESSES: All written comments and requests for a public hearing (preferably three copies) should be addressed to the U.S. Department of Labor, Office of Exemption Determinations, Pension and Welfare Benefits Administration, room N–5649, 200 Constitution Avenue NW., Washington, DC 20210. (ATTN: D–9395 and D–9396).

FOR FURTHER INFORMATION CONTACT: Ms. Allison K. Padams, Office of Exemption Determinations, Pension and Welfare

Benefits Administration, U.S. Department of Labor, (202) 219–8971 (this is not a toll-free number); or Ms. Susan E. Rees, Plan Benefits Security Division, Office of the Solicitor, U.S. Department of Labor, (202) 219–9141 (this is not a toll-free number).

SUPPLEMENTARY INFORMATION: Notice is hereby given of the pendency before the Department of a proposed amendment to PTE 93–33 (58 FR 31053, May 28, 1993). PTE 93–33 provides relief from the restrictions of sections 406(a)(1)(D) and 406(b) of the Employee Retirement Income Security Act of 1974 (ERISA) and the sanctions resulting from the application of sections 4975 (a) and (b), 4975(c)(3) and 408(e)(2) of the Internal Revenue Code of 1986 (the Code) by reason of section 4975(c)(1) (D), (E), and (F) of the Code.[1] The amendment to PTE 93–33 proposed herein was requested in an exemption application dated April 19, 1993 filed on behalf of Citibank, N.A., (Citibank) and the Chase National Bank, N.A., (Chase) (the Applicants). The Applicants are national banks regulated by the Office of the Comptroller of the Currency. As of January 1993, the Applicants were trustees for approximately 650,000 IRA and Keogh Plans with approximately $65 billion in assets.

The Department is proposing the amendment to PTE 93–33 pursuant to section 408(a) of ERISA and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 CFR Part 2570, subpart B (55 FR 32836, August 10, 1990).

PTE 93–33 permits the receipt of services at reduced or no cost by an individual for whose benefit an IRA or Keogh Plan is established or maintained or by members of his or her family, from a bank pursuant to an arrangement in which the deposit balance in the IRA or Keogh Plan is taken into account for purposes of determining eligibility to receive such services, provided the conditions of the exemption are met.

The Applicants have requested an amendment to section III(d) of PTE 93–33 that would expand the definition of deposit to include IRA and Keogh Plan investments in securities for which market quotations are readily available. In this regard, section III(d) of PTE 93–33 defines the term deposit balance to mean deposits as that term is defined under 29 CFR 2550.408(b)–4(c)(3).[2]

According to the Applicants, IRA and Keogh Plan assets are currently invested in a variety of investment products including bank deposits, stocks and mutual funds. The Applicants argue that the amendment is appropriate because it would permit individuals to consider a broader range of investment options when making investment decisions with respect to their IRA or Keogh Plans and still take advantage of PTE 93–33 for purposes of receiving reduced or no cost services. In addition, the Applicants state that the current limitation on investments that may be taken into account under PTE 93–33 may cause an individual to consider an investment in a deposit account rather than a common stock mutual fund in order to receive reduced or no cost services. Furthermore, the Applicants argue that IRA and Keogh Plan investors may interpret PTE 93–33 as suggesting that investments in bank deposits are appropriate investments for IRAs and Keogh Plans. Accordingly, the Applicants believe that the amendment would encourage individuals to consider a broad range of investment alternatives for their IRAs and Keogh Plans without regard to whether they receive reduced or no cost services.

In addition, the Applicants state that the rate of return earned on an IRA or Keogh Plan investment in securities for which relief has been requested can be readily determined through the use of market quotations.[3] According to the Applicants, market quotations can be obtained from sources such as broker-dealers, trading or quotation systems, newspapers, and in the case of redeemable shares in an investment company, from the issuer or principle underwriter. Consequently, the requirement that the securities taken into account are those for which there are readily available market quotations assures that there is an independent basis for determining that the conditions of section II(e) have been satisfied.[4]

Based on the arguments presented by the Applicants and the additional protections already embodied in PTE 93–33, it appears to the Department that the safeguards contained in PTE 93–33 would not be diminished by the proposed amendment. IRA and Keogh Plan assets would continue to be well protected under the terms of the exemption. Therefore, the Department has decided to propose relief that modifies section III(d) to include investments in securities for which market quotations are readily available.[5] Thus, under this proposed modification, the bank could not take into account, for purposes of this exemption investments in, among other things, non-publicly traded limited partnerships and real estate investment trusts, foreign currency, futures, commodities and real estate.

Further, the Department notes that the exemption does not provide relief for investments in securities, including the acquisition of interests in collective investment funds, that are offered exclusively to IRA or Keogh Plans by the bank (or its affiliate).[6] Accordingly, the definition of account balance specifically excludes investments in securities offered by the bank exclusively to IRAs and Keogh Plans.

In this regard, the Department requests that interested persons, in addition to other comments, describe how a relationship banking program would operate with respect to investments in securities for which market quotations are readily available, and whether additional safeguards are necessary in order to protect the interests of the participants and beneficiaries of IRA and Keogh Plans.

Notice to Interested Persons

Because many participants in IRAs and Keogh Plans and financial institutions could conceivably be considered interested persons, the only practical form of notice is publication in the **Federal Register.**

General Information

The attention of interested persons is directed to the following:

(1) Before an exemption may be granted under section 408(a) of ERISA and section 4975(c)(2) of the Code, the Department must find that the exemption is administratively feasible, in the interests of the IRAs and Keogh Plans, and their participants and beneficiaries and protective of the rights

[1] Section 102 of Reorganization Plan No. 4 of 1978 (42 FR 47713, October 17, 1978) generally transferred the authority of the Secretary of the Treasury to issue administrative exemptions under section 4975(c)(2) of the Code to the Secretary of Labor.

[2] 29 CFR 2550.408b–4(c)(3) provides that deposits are any account upon which a reasonable rate of interest is paid, including a certificate of deposit issued by a bank or similar financial institution.

[3] The Department notes that the proposed amendment does not provide relief for any prohibited transactions that may occur in connection with the acquisition or sale by the IRA or Keogh Plan of securities or shares of a mutual fund.

[4] Section II(e) requires that the rate of return on the IRA or Keogh Plan investment is no less favorable than the rate of return on an identical investment that could have been made at the same time at the same branch of the bank by a customer of the bank who is not eligible for (or who does not receive) reduced or no cost services.

[5] For purposes of this exemption, the term "securities for which market quotations are readily available" is derived from Federal securities law, in particular, the Investment Company Act of 1940 and regulations issued thereunder. See *e.g.*, 17 CFR §§ 270.2a–4, 270.17a–7 (1992).

[6] The Department notes that the Applicants have not requested such relief.

of participants and beneficiaries of such plans.

(2) The proposed amendment, if granted, will be supplemental to, and not in derogation of, any other provisions of ERISA and the Code, including statutory or administrative exemptions and transitional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction.

(3) If granted, the proposed amendment will be applicable to a transaction only if the conditions specified in the class exemption are met.

Written Comments and Hearing Request

All interested persons are invited to submit written comments or requests for a public hearing on the proposed exemption to the address and within the time period set forth above. All comments will be made a part of the record. Comments and requests for a hearing should state the reasons for the writer's interest in the proposed exemption. Comments received will be available for public inspection with the referenced application numbers at the above address.

Proposed Amendment

Under section 408(a) of ERISA and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 CFR part 2570, subpart B, the Department proposes to amend PTE 93–33 as set forth below:

(1) Section I is amended to read: "Effective May 11, 1993, the restrictions of sections 406(a)(1)(D) and 406(b) of ERISA and the sanctions resulting from the application of section 4975 of the Code, including the loss of exemption of an individual retirement account (IRA) pursuant to section 408(e)(2)(A) of the Code, by reason of section 4975(c)(1)(D), (E) and (F) of the Code, shall not apply to the receipt of services at reduced or no cost by an individual for whose benefit an IRA or, if self-employed, a Keogh Plan, is established or maintained, or by members of his or her family, from a bank pursuant to an arrangement in which the account balance in the IRA or Keogh Plan is taken into account for purposes of determining eligibility to receive such services, provided that each condition of Section II of this exemption is satisfied."

(2) Section II(a) is amended to read: "The IRA or Keogh Plan, the account balance of which is taken into account for purposes of determining eligibility to receive services at reduced or no cost, is established and maintained for the exclusive benefit of the participant covered under the IRA or Keogh Plan, his or her spouse or their beneficiaries."

(3) Section II(d) is amended to read: "For the purpose of determining eligibility to receive services at reduced or no cost, the account balance required by the bank for the IRA or Keogh Plan is equal to the lowest balance required for any other type of account which the bank includes to determine eligibility to receive reduced or no cost services."

(4) Section III(d) is amended to read: "The term account balance means deposits as that term is defined under 29 CFR 2550.408b–4(c)(3), or investments in securities for which market quotations are readily available. For purposes of this exemption, the term account balance shall not include investments in securities offered by the bank (or its affiliate) exclusively to IRAs and Keogh Plans."

Signed at Washington, DC, this 15th day of November 1993.

Alan D. Lebowitz,

Deputy Assistant Secretary of Program Operations, Pension and Welfare Benefits, Administration, U.S. Department of Labor.

[FR Doc. 93–28511 Filed 11–18–93; 8:45 am]

BILLING CODE 4510-29-P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Meetings

AGENCY: National Endowment for the Humanities, NFAH.

ACTION: Notice of meetings.

SUMMARY: Pursuant to the provisions of the Federal Advisory Committee Act (Pub. L. 92–463, as amended), notice is hereby given that the following meetings of the Humanities Panel will be held at the Old Post Office, 1100 Pennsylvania Avenue NW., Washington, DC 20506.

FOR FURTHER INFORMATION CONTACT: David C. Fisher, Advisory Committee Management Officer, National Endowment for the Humanities, Washington, DC 20506; telephone (202) 606–8322. Hearing-impaired individuals are advised that information on this matter may be obtained by contacting the Endowment's TDD terminal on (202) 606–8282.

SUPPLEMENTARY INFORMATION: The proposed meetings are for the purpose of panel review, discussion, evaluation and recommendation on applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965, as amended, including discussion of information given in confidence to the agency grant applicants. Because the proposed meetings will consider information that is likely to disclose: (1) Trade secrets and commercial or financial information obtained from a person and privileged or confidential; or (2) information of a personal nature the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, pursuant to authority granted me by the Chairman's Delegation of Authority to Close Advisory Committee meetings, dated July 19, 1993, I have determined that these meetings will be closed to the public pursuant to subsections (c) (4), and (6) of section 552b of title 5, United States Code.

1. *Date:* December 6, 1993
   Time: 9 a.m. to 5 p.m.
   Room: 415
   Program: This meeting will review applications for projects in Prehistoric Archaeology in Interpretive Research, submitted to the Division of Research Programs, for projects beginning after April 1, 1994.
2. *Date:* December 9, 1993
   Time: 9 a.m. to 5 p.m.
   Room: 415
   Program: This meeting will review applications for projects in Historic Archaeology in Interpretive Research, submitted to the Division of Research, for projects beginning after April 1, 1994.
3. *Date:* December 14, 1993
   Time: 9 a.m. to 5 p.m.
   Room: 415
   Program: This meeting will review applications for projects in Archaeology Publication in Interpretive Research, submitted to the Division of Research Programs, for projects beginning after April 1, 1994.

David C. Fisher,

Advisory Committee, Management Officer.

[FR Doc. 93–28490 Filed 11–18–93; 8:45 am]

BILLING CODE 7536-01-M

NATIONAL SCIENCE FOUNDATION

Advisory Committee for Education and Human Resources; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Advisory Committee for Education and Human Resources

Date and time: December 9–10, 1993, 8:30 a.m.–5:30 p.m.

Place: Room #365, 4201 Wilson Blvd., Arlington, VA

Type of meeting: Closed

Contact person: Arturo Bronson, Program Director, RIMI, Human Resource Development, room 815, National Science Foundation, 4201 Wilson Blvd., Arlington, VA Telephone: (703) 306–1634.

Purpose of meeting: To carry out Committee of Visitors (COV) review, including examination of decisions on proposals, reviewer comments, and other privileged materials.

Agenda: To provide oversight review of the Research Improvement In Minority Institutions (RIMI) Program.

Reason for closing: The meeting is closed to the public because the Committee is reviewing proposal actions that will include privileged intellectual property and personal information that could harm individuals if they were disclosed. If discussions were open to the public, these matters that are exempt under 5 U.S.C. 552b(c) (4) and (6) of the Government in the Sunshine Act would be improperly disclosed.

Dated: November 16, 1993.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 93–28508 Filed 11–18–93; 8:45 am]

BILLING CODE 7555–01–M

NUCLEAR REGULATORY COMMISSION

[Docket No. 51–344]

Portland General Electric Co. et al., Trojan Nuclear Plant; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption for 10 CFR 50.120. This exemption would be granted to the Portland General Electric Company (the licensee) for the Trojan Nuclear Plant (Trojan) located in Columbia County, Oregon.

Environmental Assessment

Identification of Proposed Action

The proposed action would grant an exemption from the training program establishment, implementation, and maintenance requirements of 10 CFR 50.120. By letters dated August 10, October 14, and October 21, 1993, the licensee requested this exemption.

The Need for the Proposed Action

The purpose of 10 CFR 50.120 is to ensure that civilian nuclear power plant operating personnel are trained and qualified to safely operate and maintain the facility commensurate with the safety status of the plant. The proposed action would grant an exemption from the training requirements of 10 CFR 50.120 for the Trojan plant. However, it does not relieve the licensee from previous requirements or commitments to train and qualify facility personnel. The licensee requested this exemption in letters dated August 10, October 14, and October 21, 1993.

Environmental Impacts of the Proposed Action

The proposed action does not have any effect on accident risk and the possibility of environmental impact is extremely remote.

The licensee stated in their submittal of October 14, 1993, that there are no credible accident scenarios at Trojan that could result in offsite doses greater than a small fraction of the U.S. Environmental Protection Agency Protective Action Guidelines. Furthermore, the level of personnnel activity at Trojan is low compared to an operating reactor facility and the existing training programs are deemed acceptable, given the low level of activity at the site and the shutdown and defueled status of the plant.

Based on our review of the August 10, October 14, and October 21, 1993, submittals, the staff concludes that accidents which may potentially result in a radiological release are greatly decreased given the permanently shutdown and defueled status of Trojan.

Therefore, the proposed action does not increase the probability or consequences of any accidents, no changes are being made in the types of any effluent that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure onsite.

Accordingly, the Commission concludes that this proposed action would result in no significant radiological environment impact.

With regard to potential nonradiological impacts, the proposed action does not affect nonradiological plant effluent and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed action.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the action. This would not reduce environmental impacts of plant operation and would not enhance the protection of the environment nor public health and safety.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the final environmental statement for the Trojan Nuclear Plant, dated August 1973.

Agencies and Persons Consulted

The NRC staff consulted with representatives of the State of Oregon Department of Energy regarding the environmental impact of the proposed action. The State representative contacted had no comment.

Finding of No Significant Impact

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment. The Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to this action, see the licensee submittals dated August 10, October 14, and October 21, 1993, which are available for public inspection at the Commission at the Commission Public Document Room, 2120 L Street, NW., Washington, DC 20555, and at the local Public Document Room for the Trojan Nuclear Plant at the Branford Price Millar Library, Portland State University, Portland, Oregon 97207.

Dated at Rockville, Maryland, this 12th day of November 1993.

For the Nuclear Regulatory Commission.

Richard F. Dudley,

Acting Director, Non-Power Reactors and Decommissioning Project Directorate, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation.

[FR Doc. 93–28501 Filed 11–18–93; 8:45 am]

BILLING CODE 7590–01–M

[Docket No. 50–206]

Southern California Edison Co., San Onofre Nuclear Generating Station, Unit 1; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from 10 CFR 50.120. The exemption would be granted to the Southern California Edison Company (the licensee) for the San Onofre Nuclear Generating Station, Unit 1 located in San Clemente, California.

Environmental Assessment

Identification of Proposed Action

The NRC, on its own motion, is considering granting an exemption from the training program establishment, implementation, and maintenance requirements of 10 CFR 50.120. The licensee in its letter dated August 2, 1993, provided information supporting this action.

The Need for the Proposed Action

San Onofre Nuclear Generating Station, Unit 1 permanently ceased power operation in November 1992, fuel has been moved from the reactor to the spent fuel pool, and the licensee has developed detailed plans to decomission the facility. The proposed exemption would relieve the licensee from the training requirements of 10 CFR 50.120. However, it would not relieve the licensee from previous requirements or commitments to train and qualify facility personnel.

Environmental Impacts of the Proposed Action

The proposed action does not have any effect on accident risk and the possibility of environmental impact is extremely remote.

The licensee submitted a safety analysis in their letter of August 2, 1993, which analyzed the most credible accidents with the fuel stored in the spent fuel pool. The licensee noted that the only accidents in Chapter 15 of the Updated Final Safety Analysis Report which remain credible for this facility are a fuel handing accident and a loss of offsite electrical power event. The licensee noted the likelihood of the fuel handling accident is much less than if the plant were operational, since fuel movement will probably occur only one more time in the next 20 years, as compared to approximately every 18 months when the plant was operating. The licensee in its letter dated November 5, 1993, requesting approval to remove SONGS 1 from the site offsite emergency plan, provided the results of a fuel handling accident based on current plant conditions. The results of this new analysis are a two-hour dose to the thyroid of 0.5 mrem and a two-hour whole body dose of 1.3 mrem, at the exclusion area boundary. Thus, the consequences of the limiting design basis accident for the SONGS 1 facility are significantly less than 10 CFR Part 100, and significantly less than the EPA protection action guidelines of 1 to 5 rem. Further, the licensee stated that the consequences of a loss of offsite power are minimal since electrical power will not be needed to prevent boiling in the spent fuel pool.

Based on the staff review of the licensee submittals, the staff concludes that the environmental and safety consequences of accidents which may potentially result in a radiological release are greatly decreased given the permanently shutdown and defueled status of the San Onofre Nuclear Generating Station, Unit 1. In addition, the level of personnel activity at San Onofre Nuclear Generating Station, Unit 1 is low compared to an operating reactor facility and the existing training programs are deemed acceptable, given the low level of activity at the site and the shutdown and defueled status of the plant.

The continuation of the existing training program requirements and commitments is sufficient to assure safety of a permanently defueled facility and does not increase the probability or consequences of any accidents. No changes are being made in the types of any effluents that may be released offsite and there is not significant increase in the allowable individual or cumulative occupational radiation exposure onsite.

Accordingly, the Commission concludes that the proposed action would result in no significant radiological environmental impact.

With regard to potential nonradiological impacts, the proposed action does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed action.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the action. This would not reduce environmental impacts of plant operation and would not enhance the protection of the environment nor public health and safety.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in previous reviews for the San Onofre Nuclear Generating Station, Unit 1.

Agencies and Persons Consulted

The NRC staff consulted with the State of California regarding the environmental impacts of the proposed action.

Finding of No Significant Impact

Based upon the foregoing environmental assessment, the NRC staff concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined, pursuant to 10 CFR 51.31, not to prepare an environmental impact statement for the proposed action.

For further details with respect to this action, see the licensee letter dated August 2, 1993, which is available for public inspection at the Commission Public Document Room, 2120 L Street, NW., Washington, DC 20555, and at the Local Public Document Room at the Main Library, University of California, Post Office Box 19557, Irvine, California 92713.

Dated at Rockville, Maryland, this 12th day of November 1993.

For the Nuclear Regulatory Commission.

Richard F. Dudley, Jr.,

Acting Director, Non-Power Reactors and Decommissioning Project Directorate, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation.

[FR Doc. 93–28499 Filed 11–18–93; 8:45 am]

BILLING CODE 7590-01-M

Docket No. 50–029

Yankee Atomic Electric Co., Yankee Nuclear Power Station; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from CFR 50.54(y) for the Yankee Nuclear Power Station (YNPS or the plant). This exemption would be granted to the Yankee Atomic Electric Company (Yankee or the licensee) for YBNPS which is located in Franklin County, Massachusetts.

Environmental Assessment

Identification of Proposed Action

The proposed action would grant an exemption from the requirements of 10 CFR 50.54(y) to Yankee in response to the licensee request of September 24, 1993. This regulation states that, as a minimum, a licensed senior operator may approve any emergency action that departs from either a license condition or technical specification when permitted by 10 CFR 50.54(x).

The Need for the Proposed Action

The YAEC letter of September 24, 1993, stated that the plant has

permanently ceased power operation and that all nuclear fuel has been removed from the containment to the spent fuel pool and that the licensed operator positions have been eliminated at Yankee through an NRC license amendment dated July 22, 1992. The licensee requested that 10 CFR 50.54(y) exemption so that the certified fuel handler (CFH) position could replace the licensed senior operator in regard to the authority to take the requisite emergency actions under 10 CFR 50.54(x). The NRC approved the CFH position in a letter dated June 16, 1992.

Environmental Impacts of the Proposed Action

The proposed action does not have any effect on accident risk and the possibility of environmental impact is extremely remote.

In a request for an exemption from an emergency plan exercise dated May 22, 1992, the licensee submitted a safety analysis which analyzed the most credible accident concerning the fuel in the spent fuel pool. This event was the drop of a fuel bundle and subsequent release of all gaseous radioactive gap activity which is the only remaining design basis accident at the plant. The staff reviewed the YAEC analysis and found the consequences acceptable; our review was conducted as part of our exemption of July 24, 1992; however, the review is also pertinent to this proposed action. In addition, the fuel has now decayed for an additional period of time which further lessens the accident consequences considered in our July 24 exemption.

Based on our review of the September 24, 1993 submittal and our July 24, 1992 exemption, we have concluded that the environmental and safety consequences of accidents which may potentially result in a radiological release are greatly decreased given the plant's permanently shutdown and defueled status and over two years of decay in the fuel.

Therefore, the proposed action does not increase the probability or consequences of any accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure onsite.

Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed action does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed action.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the action. This would not reduce environmental impacts of plant operation and would not enhance the protection of the environment nor public health and safety.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in previous reviews for the Yankee Nuclear Power Station.

Agencies and Persons Consulted

The staff consulted with the Commonwealth of Massachusetts regarding the environmental impact of the proposed exemption. The state representative contacted had no comment on the proposed exemption.

Finding of No Significant Impact

The Commission has determined not to prepare an environmental impact statement for the proposed action. Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for exemption dated September 24, 1993, which is available for public inspection at the Commission Public Document Room, 2120 L Street, NW., Washington, DC 20555, and at the local public document room at the Greenfield Community College, 1 College Drive, Greenfield, Massachusetts 01301.

Dated at Rockville, Maryland, this 12th day of November 1993.

For the Nuclear Regulatory Commission.

Richard F. Dudley, Jr.,

Acting Director, Non-Power Reactors and Decommissioning Project Directorate, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation.

[FR Doc. 93–28497 Filed 11–18–93; 8:45 am]

BILLING CODE 7590-01-M

Docket No. 50–29

Yankee Atomic Electric Co.; Yankee Nuclear Power Station; Environment Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of a partial exemption to the Training Rule, 10 CFR 50.120. The exemption would be granted to the Yankee Atomic Electric Company (the licensee) for the Yankee Nuclear Power Station (YNPS) located in Franklin County, Massachusetts.

Environmental Assessment

Identification of Proposed Action

The proposed action would grant a partial exemption from the training program establishment, implementation, and maintenance requirements of 10 CFR 50.120. The licensee requested the proposed exemption by letter dated July 28, 1993.

The Need for the Proposed Action

The licensee in its letter of July 28, 1993, stated that it has evaluated its training requirements under 10 CFR 50.120 in light of the permanently defueled status of the plant and determined that the category of Shift Technical Advisor (STA) should be exempted from the requirements of the rule as applied to the YNPS, because the requirement for a STA is no longer applicable to YNPS. License Amendment No. 141 to Facility License DPR–3, dated July 22, 1992, eliminated the requirement for a STA at the plant.

The proposed exemption would relieve the licensee from the training program establishment, implementation, and maintenance requirements for the STA position in 10 CFR 50.120. However, it would not relieve the licensee from previous requirements or commitments to train and qualify facility personnel or from the remaining 10 CFR 50.120 requirements.

Environmental Impacts of the Proposed Action

Based on the staff review of the July 28, 1993 submittal, the staff concludes that the environmental and safety consequences of accidents which may result in a radiological release due to the proposed exemption are non-existent. This conclusion is based on the fact that the STA position is required only at an operating nuclear plant and the STA has no function at a permanently defueled facility.

Therefore, the proposed action does not increase the probability or consequences of any accidents, no

changes are being made in the types of any effluents that may be released offsite, and there is no increase in the allowable individual or cumulative occupational radiation exposure onsite.

Accordingly, the Commission concludes that the proposed action would result in no additional radiological environmental impact.

With regard to potential nonradiological impacts, the proposed action does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no nonradiological environmental impacts associated with the proposed action.

Alternative to the Proposed Action

As an alternative to the proposed exemption, the staff considered denial of the exemption. Denial of the request would result in no change in current environmental impacts. Therefore, denial of the proposed exemption or the granting of the exemption would have identical non-existent environmental impacts.

Alternative Use of Resources

This action does not involve the use of any resources not considered in previous reviews for the Yankee Nuclear Power Station. The plant was licensed prior to the requirement for issuance of a Final Environmental Statement.

Agencies and Persons Consulted

The staff consulted with the Commonwealth of Massachusetts regarding the environmental impact of the proposed action. The State representative contacted had no comment on the proposed exemption.

Finding of No Significant Impact

The Commission has determined not to prepare an environmental impact statement for the proposed action. Based upon the foregoing environmental assessment, the staff concludes that the proposed action will not have any effect on the quality of the human environment.

For further details with respect to this action, see the application for exemption dated July 28, 1993, which is available for public inspection at the Commission Public Document Room, 2120 L Street, NW, Washington, DC 20555, and at the local public document room located in the library of the Greenfield Community College, 1 College Drive, Greenfield, Massachusetts 01301.

Dated at Rockville, Maryland, this 12th day of November 1993.

For the Nuclear Regulatory Commission.

Richard F. Dudley,

Acting Director, Non-Power Reactors and Decommissioning Project Directorate, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation.

[FR Doc. 93–28498 Filed 11–18–93; 8:45 am]

BILLING CODE 7590-01-M

Nuclear Safety Research Review Committee Meeting of Waste Subcommittee

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of meeting.

The NSRRC Waste Subcommittee will hold a meeting on December 16–17, 1993, in the Main Conference Room of the Center for Nuclear Waste Regulatory Analyses, Building 189, Southwest Research Institute, 6220 Culebra Road, San Antonio, Texas.

The entire meeting will be open to public attendance.

The review to be conducted by the Subcommittee will be a periodic review of accomplishments, status, and plans for research programs in the area of high level waste management safety. The agenda will be as follows:

December 16:

8 a.m.–11:45 a.m.: Introductory remarks; program overview; status of the Department of Energy program; organization of the Center for Nuclear Waste Regulatory Analyses; prioritization of research programs. Repository geologic setting: volcanology of the Basin and Range; field studies of volcanism.

1 p.m.–5:30 p.m.: Repository geologic setting (continued): tectonics and geochemistry. Repository and engineered barrier systems: seismic rock mechanics and integrated waste package experiments.

December 17:

8 a.m.–11:45 a.m.: Geochemical analogs of transport. Repository performance assessment. Hydrology: field and theoretical studies.

1 p.m.–2:30 p.m.: Laboratory visits and thermohydrology.

In Building 57:

2:30 p.m.–5 p.m.: Summary perspective.

Back in Building 189: Committee discussion.

The Subcommittee will report to the full Committee on the facts and analyses discussed at the meeting.

A detailed agenda will be made available at the meeting.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Subcommittee. Questions may be asked only by members of the Committee and the staff. Persons desiring to make oral statements should notify the Nuclear Regulatory Commission staff member named below as far in advance as is practicable so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittee may exchange preliminary views regarding matters to be considered during the balance of the meeting. The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC staff regarding this review.

Further information regarding topics to be discussed, the scheduling of sessions, whether the meeting has been canceled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefore can be obtained by a prepaid telephone class to Mr. George Sege (telephone 301/492–3904) between 8 a.m. and 4:30 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individual one or two days before the scheduled meeting to be advised of any changes in schedule, etc., that may have occurred.

Dated: November 12, 1993.

George Sege,

Technical Assistant to the Director, Office of Nuclear Regulatory Research.

[FR Doc. 93–28496 Filed 11–18–93; 8:45 am]

BILLING CODE 7590-01-M

OFFICE OF MANAGEMENT AND BUDGET

Management of Federal Information Resources

AGENCY: Office of Management and Budget, Executive Office of the President.

ACTION: Notice.

SUMMARY: The Office of Management and Budget, together with the Information Policy Committee of the Information Infrastructure Task Force, is promoting the establishment of an agency-based Government Information Locator Service (GILS). Comments are requested concerning a draft design concept for the proposed GILS. In addition, a public meeting will be held to solicit views on the proposed GILS. To receive a paper copy of the draft document, or to request an opportunity to speak at the public meeting, please

call the information contact shown below. Persons wishing to attend the public meeting but not be scheduled to speak need not identify themselves in advance.

DATES: Comments on the draft design concept should be received by December 15, 1993. The public meeting will begin at 2:00 p.m. on December 13, 1993, and run until 4:00.

ADDRESSES: Written comments on paper should be sent to Barbara Banks, Information Policy Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, room 3235, New Executive Office Building, Washington, DC 20503. The public meeting will be held in the auditorium at the Department of the Interior, 1849 C Street, NW., Washington, DC.

ELECTRONIC AVAILABILITY AND COMMENTS: In addition to paper copy, the draft design concept will be available on the FedWorld bulletin board. FedWorld can be accessed by using a modem to dial 703/321–8020. No parity, one stop bit and eight data bits. Set terminal emulation to ANSI or connect to fed world. gov by using Internet telnet command. For further instructions to access FedWorld, call 703/487–4608. The document will also be available on the Internet via anonymous File Transfer Protocol (FTC) from 130.11.48.107 as /pub/gils.doc (Microsoft Word for Windows format) or /pub/gils.txt [ASCII text format]. Electronic comments on the draft may be submitted via electronic mail to the following OMB X.400 mail address: /s=gils/c=us/admd=telemail/prmd=gov+eop. (Internet users should add /@sprint.com at the end of the address.)

FOR FURTHER INFORMATION CONTACT: Barbara Banks, Information Policy Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, room 3235, New Executive Office Building, Washington, DC 20503. Telephone: (202) 395–4814.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget, together with the Information Policy Committee of the Information Infrastructure Task Force, is promoting establishment of an agency-based Government Information Locator Service (GILS). OMB Circular A–130 encourages agencies to use new technologies to make government information available to the public in a timely and equitable manner, via a diverse array of sources, both public and private. The Circular states as policy that agencies shall: maintain inventories of all agency information dissemination products; provide information on how the public may access information resources; and, develop aids to locating agency information, included catalogs and directories.

GILS would identify public information resources throughout the Federal Government, describe the information available in those resources and provide assistance in how to obtain the information. It would consist of a decentralized collection of agency-based information locators and associated information services. While GILS would encompass a very wide range of information sources and many mechanisms for finding and delivering information, a "GILS Core" would be specifically defined to be a definitive locator of agency information resources. The GILS Core would be accessible on public networks without charge to direct users.

GILS would be implemented with full protection of individual rights of privacy and intellectual property rights. An evaluation program would also be established to determine the degree to which GILS meets user information needs, including accessibility, ease of use, accuracy and timeliness of information, and completeness of coverage.

The public comment would be served by GILS directly or through intermediaries. Central disseminating agencies such as the Government Printing Office and the National Technical Information Service would act as intermediaries to GILS, as would public libraries and private sector information services offering GILS contents through kiasks, 800 numbers, electronic mail, bulletin boards, FAX, and off-line media such as floppy disks, CD–ROM, and printed works. GILS would supplement, but not necessarily supplant, other agency information dissemination mechanisms and commercial information sources.

GILS would use network technology and the ANSI Z39.50 standard for information search and retrieval, so that information can be retrieved in a variety of ways and so that GILS users can gain access to many other major Federal and non-Federal information resources. The proposed design anticipates that various automated linkages will be used to facilitate electronic delivery of off-the-shelf information products, as well as to guide users to data systems that support analysis and synthesis of information.

Sally Katzen,

Administrator, Office of Information and Regulatory Affairs.

[FR Doc. 93–28570 Filed 11–18–93; 8:45 am]

BILLING CODE 3110-01-M

PHYSICIAN PAYMENT REVIEW COMMISSION

Commission Meeting

AGENCY: Physician Paymant Review Commission.

ACTION: Notice of meeting.

SUMMARY: The Commission will hold its next public meeting on Wednesday, December 8 through Friday, December 10, 1993 at the Embassy Suites Downtown Hotel, 1250 22nd Street NW., Washington, DC, in the Consulate Room. The meetings are expected to begin at 9 a.m. each day. Much of the meeting will be devoted to reviewing such areas as cost containment, risk adjustment, the roles of health alliances, establishing fee schedules, ensuring quality, coverage decisions for new technologies, ensuring access for the underserved, graduate medical education, and provisions affecting the Medicare program.

ADDRESSES: The Commission is located at 2120 L Street, NW. in Suite 510, Washington, DC. The telephone number is 202/653–7220.

FOR FURTHER INFORMATION CONTACT: Lauren LeRoy, Deputy Director, or Annette Hennessey, Executive Assistant, at 202/653–7220.

SUPPLEMENTARY INFORMATION: Agendas for the meeting will be available on Thursday, December 2, 1993 and will be mailed out at that time. To receive an agenda, please direct all requests to the receptionist at 202/653–7220.

Paul B. Ginsburg,

Executive Director.

[FR Doc. 93–28476 Filed 11–18–93; 8:45 am]

BILLING CODE 6820-SE-M

SECURITIES AND EXCHANGE COMMISSION

Forms Under Review by Office of Management and Budget

Agency Clearance Officer—John J. Lane, (202) 272–3900.

Upon written request copy available from: Securities and Exchange Commission, Office of Filings, Information and Consumer Services, Washington, DC 20549.

Proposed Revisions:

Form F–1; File No. 270–249
Form F–2; File No. 270–250
Form F–3; File No. 270–251
Form F–4; File No. 270–288
Form 20–F; File No. 270–156
Form 8–K; File No. 270–107
Form 8–K; File No. 270–50

Notice is hereby given pursuant to the Paperwork Reduction Act of 1980 (44

U.S.C. 3501 *et seq.*), that the Securities and Exchange Commission ("Commission") has submitted the following proposed rule revisions for OMB approval.

Forms F–1, F–2, F–3, and F–4 are used to register securities of certain foreign private issuers under the Securities Act of 1933. It is estimated that if the proposed amendments are adopted, approximately 13 respondents would file Form F–1 annually at an estimated 2,205 burden hours per response with a total annual burden of 28,665 hours; 3 respondents would file Form F–2 annually at an estimated 779 burden hours per response with a total annual burden of 2,337 hours; 5 respondents would file Form F–3 annually at an estimated 229 burden hours per response with a total annual burden of 1,145 hours; and 2 respondents would file Form F–4 annually at an estimated 1,324 burden hours per response with a total annual burden of 2,648 hours.

Form 20–F is used to register securities of foreign private issuers under the Securities Exchange Act of 1934 and as an annual report. It is estimated that 133 respondents would file Form 20–F annually at an estimated 2,010 burden hours per response with a total annual burden of 267,330 hours.

Form 6–K is used to file reports of foreign issuers under the Exchange Act. It is estimated that 990 respondents would file Form 6–K annually at an estimated 8 burden hours per response with a total annual burden of 7,920 hours.

Form 8–K is used to disclose current reports under the Exchange Act. It is estimated that 12,150 respondents would file Form 8–K annually at an estimated 5 burden hours per response with a total annual burden of 60,750 hours.

The estimated average burden hours are made solely for purposes of the Paperwork Reduction Act and are not derived from a comprehensive or even a representative survey or study of the costs of Commission rules and forms.

General comments regarding the estimated burden hours should be directed to Gary Waxman at the address below. Any comments concerning the accuracy of the estimated average burden hours for compliance with Commission rules and forms should be directed to John J. Lane, Associate Executive Director, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549 and Gary Waxman, Clearance Officer, Office of Management and Budget (Project Nos. 3235–0258; 3235–0257; 3235–0256; 3235–0325; 3235–0288; 3235–0116; 3235–0060), room 3208, New Executive Office Building, Washington, DC 20503.

Dated: November 9, 1993.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28454 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

[Release No. 34–33194; International Series Release No. 611; File No. SR–Amex–91–26]

Self-Regulatory Organizations; Order Granting Partial Approval of Amendment No. 2 to a Proposed Rule Change by the American Stock Exchange Inc., Relating to Listing Options on a Certain Specific American Depositary Receipt

November 12, 1993.

I. Introduction

On August 21, 1992, the American Stock Exchange, Inc. ("Amex" or "Exchange"), filed with the Securities and Exchange Commission ("Commission"), pursuant to section 19(b) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] Amendment No. 2 to a proposed rule change (File No. SR–Amex–91–26), which requests Commission approval to list and trade options on American Depositary Receipts ("ADRs") representing the shares of Empresas ICA Sociedad Controladora S.A. de C.V. ("Empresas").[3]

Amendment No. 2 to the proposed rule change was published for comment in Securities Exchange Act Release No. 31117 (August 28, 1992), 57 FR 40703 (September 4, 1992). No comments were received on this amendment.[4]

II. Description

On November 27, 1992, the Commission approved a Amex proposal to list and trade ADR options where the underlying foreign security is subject to a comprehensive surveillance sharing agreement and the underlying ADR meets or exceeds the Exchange's established uniform options listing standards.[5] First, the ADR Approval Order provides that for ADR options to be eligible for listing and continued trading, the Amex must have comprehensive surveillance sharing agreements in place with the foreign exchanges that serve as the primary markets for the foreign securities underlying the ADRs, unless the Commission otherwise approves the options' listing without an agreement. Second, the Amex's initial listing standards require that the ADRs underlying the Exchange-listed options have a "float" of 7,000,000 ADRs outstanding, 2,000 shareholders, trading volume of at least 2,400,000 over the prior twelve month period, and a minimum price of $7½ for a majority of the business days during the preceding three-month period. Moreover, options on ADRs must meet or exceed the maintenance criteria for continued listing under the Amex rules. Those criteria require that the ADRs underlying Exchange-listed options maintain a "float" of 6,300,000 ADRs, 1,600 shareholders, trading volume of at least 1,800,000 over the prior twelve-month period, and a minimum price of $5 on a majority of the business days during the preceding six-month period. Additionally, the ADR Approval Order requires the Amex to make reasonable

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[1] 15 U.S.C. 78s(b) (1988).

[2] 17 CFR 240.19b–4 (1993).

[3] On October 8, 1991, and May 27, 1992, the Amex submitted to the Commission a proposed rule change, and Amendment No. 1 to the proposed rule change, to provide for the listing and trading of options on ADRs and preferred stock. On November 27, 1992, the Commission granted partial approval of this proposal to permit the listing of options on ADRs where there is a comprehensive surveillance sharing agreement in place between the Amex and the primary exchange on which the foreign security underlying the ADR is listed. *See* Securities Exchange Act Release No. 31529 (November 27, 1992), 57 FR 57248 (December 3, 1992) ("ADR Approval Order"). Amendment No. 2 to the proposed rule change requested, among other things, Commission approval to trade options on ADRs representing shares of Empresas, Sony Corporation ("Sony"), Toyota Motor Corporation ("Toyota"), and Vitro Sociedad Anonima ("Vitro"), all of which primarily trade on exchanges that have not entered into surveillance sharing agreements with the Amex. With respect to ADRs overlying shares of Sony, Toyota, and Vitro, less than 50% of the world-wide volume of the shares and ADRs of these issuers trade in the U.S. ADR market. See letter from Claire P. McGrath, Managing Director and Special Counsel, Derivative Securities, Amex, to Richard Zack, Branch Chief, Division of Market Regulation ("Division"), Commission, dated November 2, 1993 ("November 2nd Letter"). Because the primary home markets for trading in shares of these issuers are foreign exchanges with which the Amex has not entered into surveillance sharing agreements covering these products, the Commission cannot at this time give the Amex the authority to list options on ADRs representing the shares of Sony, Toyota, or Vitro. See discussion at *infra* notes 16 through 18, accompanying text.

[4] The Commission did not receive any comments on the Amex's proposal to list options on ADRs and preferred stock. The proposal originally was published for comment in Securities Exchange Act Release No. 29839 (October 18, 1991), 56 FR 55356 (October 25, 1991). Amendment No. 1 was published for comment in Securities Act Release No. 31117 (August 28, 1992), 57 FR 40703 (September 4, 1992). Amendment No. 3 was withdrawn and replaced by Amendment No. 4, which was published for comment in the ADR Approval Order, *supra* note 3.

[5] ADR Approval Order, *supra* note 3. A comprehensive surveillance sharing agreement provides, among other things, for the exchange of market trading activity, clearing activity, and the identity of the ultimate purchaser or seller of the securities traded.

inquiry to evaluate the securities underlying the ADRs to ensure that these securities are generally consistent with the above-noted listing requirements.

Furthermore, the Amex options initial listing standards require that the ADR underlying an ADR option be registered and listed on a national securities exchange or traded through the facilities of a national securities association and be reported as a national market system security. The issuers of the ADRs also must be in compliance with any other applicable requirements of the Act.

The current proposal would authorize the Amex to list and trade options on ADRs representing the shares of Empresas, even though the Amex does not have a surveillance sharing agreement with the primary exchange on which the foreign securities underlying the ADRs trade. The foreign securities underlying Empresas ADRs trade primarily on the Mexican Stock Exchange, while the ADRs trade primarily on the New York Stock Exchange ("NYSE").[6]

Although the Amex does not have a surveillance sharing agreement with the Mexican Stock Exchange, the Amex does not believe that this will impair its ability to detect or deter potential manipulations of the market in Empresas ADR options because the dominant underlying market for the ADR options is the U.S. ADR market, rather than the Mexican Stock Exchange.[7] Since the Amex, the NASD, and the U.S. exchanges on which Empresas ADRs trade are members of the Intermarket Surveillance Group ("ISG"), the Amex believes that it has the ability to conduct adequate surveillance of trading in Empresas ADR options.[8]

III. Discussion

The Commission finds the portions of the proposed rule change related to the listing of options on ADRS representing shares of Empresas are consistent with the requirements of the Act and rules and regulations thereunder applicable to a national securities exchange, and, in particular, the requirements of section 6(b)(5).[9] Specifically, the Commission finds that allowing options to trade on ADRs representing the shares of Empresas, among other things, gives investors a better means to hedge their positions in the ADRs, as well as enhanced market timing opportunities.[10] Further, the pricing of the ADRs underlying Empresas ADR options may become more efficient and market makers in these ADRs, by virtue of enhanced hedging opportunities, may be able to provide deeper and more liquid markets.[11] In sum, options on ADRs likely engender the same benefits to investors and the market place that exist with respect to options on common stock.[12]

The Commission also believes that it is appropriate to permit the Amex to list and trade options on Empresas ADRs given that these options will be subject to specific requirements related to the protection of investors. First, Amex rules require that the ADRs underlying these options meet the Amex's uniform options listing standards in all respects. As described above, this would include the initial and maintenance criteria. These criteria ensure, among other things, that the underlying ADRs will maintain adequate price and float to prevent the ADR options from being readily susceptible to manipulation. Second, the ADR Approval Order requires that the Amex make a reasonable inquiry to evaluate Empresas securities to ensure that these securities are generally consistent with the requirements set forth in the Exchange's options listing standards. In the ADR Approval Order, the Commission recognized that in some cases, an ADR underlying an option could meet the options listing standards while the foreign security on which the ADR is based may not meet these standards in every respect. For example, in the case of ADRs overlying certain foreign securities, one ADR could represent several shares of a specific stock. For this reason, it is possible that the price of the ADR will meet exchange listing standards even though the market price of the foreign security underlying the ADR may be less than the Amex standard. The Commission believes, however, that requiring the Amex to review the securities underlying Empresas ADRs to ensure that they are generally consistent with the Exchange's options listing standards, along with other market safeguards, will adequately protect investors from the possibility that these ADR options can be potentially manipulated.[13]

Third, the Amex has in place an adequate mechanism for providing for the exchange of the surveillance information necessary to adequately detect and deter market manipulation or trading abuses involving Empresas ADR options. Although the Amex does not have an effective surveillance sharing agreement with the Mexican Stock Exchange, the Commission believes that this does not impair the ability of the Amex to detect or deter manipulation since the majority of the trading activity in these Mexican securities occurs in the U.S. ADR market. The Commission notes that the Amex, the U.S. exchanges on which Empresas ADRs trade, and the NASD are members of the ISG, which will provide for the exchange of necessary surveillance information concerning trading activity in the

[6] Although the NYSE is the primary market for Empresas ADRs, the ADRs also trade in the United States on the Boston Stock Exchange, Inc. ("BSE"), the Chicago Stock Exchange, Inc. ("CHX"), the Cincinnati Stock Exchange, Inc. ("CSE"), the Pacific Stock Exchange, Inc. ("PSE"), the Philadelphia Stock Exchange, Inc. ("Phlx"), and through the National Association of Securities Dealers, Inc., ("NASD") Automatic Quotation System ("NASDAQ").

[7] The Amex represents that for the three month period ending September 30, 1993, 50% or more of the world-wide trading volume (on a share equivalent basis) in Empresas occurred in the U.S. ADR market. The Amex further represents that if the trading volume in the U.S. market for Empresas ADRs falls below 30% of the world-wide trading volume for Empresas ADRs and stock in any subsequent three month period, the Exchange will not open for trading any additional series of options on Empresas ADRs unless the Amex has in place a comprehensive surveillance sharing agreement with the primary exchange in the home country where the foreign security underlying the ADR is traded or the Commission otherwise authorizes the listing. *See* November 2nd Letter, *supra* note 3.

[8] ISG was formed on July 14, 1993 to, among other things, coordinate more effectively surveillance and investigative information sharing arrangements in the stock and options markets. *See* Intermarket Surveillance Group Agreement, July 14, 1983. The most recent amendment to the ISG Agreement, which incorporates the original agreement and all amendments made thereafter, was signed by ISG members on January 29, 1990. *See* Second Amendment to the Intermarket Surveillance Group Agreement, January 29, 1990. The members of the ISG are: the Amex, the BSE, the CBOE, the CHS, the CSE, the NASD, the NYSE, the PSE, and the Phlx.

[9] 15 U.S.C. 78f(b)(5) (1988).

[10] For example, if an investor wants to invest in ADRs but does not have sufficient cash available until a future date, he can purchase an ADR option now for less money and exercise the option to purchase the ADRs at a later date.

[11] See *e.g.* Report of the Special Study of the Options Markets to the Securities and Exchange Commission, 96th Cong., 1st Sess. (Comm. Print No. 96–IFC3, December 22, 1978).

[12] Pursuant to section 6(b)(5) of the Act, the Commission must predicate approval of any new securities product upon a finding that the introduction of such new product is in the public interest. Such a finding would be difficult for a derivative instrument that served no hedging or other economic function, because any benefits that might be derived by market participants likely would be outweighed by the potential for manipulation, diminished public confidence in the integrity of the markets, and other valid regulatory concerns.

[13] For example, we would expect the Exchange to consider delisting an option on an ADR if the price and public float of the underlying security did not meet trading or size maintenance standards, or if the security underlying the ADR failed to meet other standards that raised manipulative concerns.

Empreasas ADR options, and the respective underlying ADR market.[14]

As a general matter, the Commission believes that the existence of a surveillance sharing agreement that effectively permits the sharing of information between an exchange proposing to list an equity option, such as options on Empresas ADRs, and the exchange trading the stock underlying the equity option is necessary to detect and deter market manipulation and other trading abuses. In particular, the Commission notes that surveillance sharing agreements provide an important deterrent to manipulation because they facilitate the availability of information needed to fully investigate a potential manipulation if it were to occur. These agreements are especially important in the context of derivative products based on foreign securities because they facilitate the collection of necessary regulatory, surveillance and other information from foreign jurisdictions.

In the context of ADRs, the Commission believes that, in most cases, the relevant underlying equity market is the primary market on which the security underlying the ADR trades. This is because, in most cases, the market for the security underlying the ADR generally is larger in comparison to the ADR market, both in terms of share volume and the value of trading. Because of the additional leverage provided by an option on an ADR, the Commission generally believes that having a comprehensive surveillance sharing agreement in place, between the exchange where the ADR option trades and the exchange where the foreign security underlying the ADR primarily trades, will ensure the integrity of the marketplace.[15] The Commission further believes that the ability to obtain relevant surveillance information, including, among other things, the identity of the ultimate purchases and sellers of securities, is an essential and necessary component of a comprehensive surveillance sharing agreement.

In the present case, however, the Commission finds that the market for Empresas ADRs is larger than the market for the underlying foreign securities. Specifically, approximately 53% of the world-wide trading volume in Empresas stock and ADRs occurs in the U.S. ADR market, which consists of the NYSE, the BSE, the CHX, the CSE, the PSE, the Phlx, and NASDAQ.[16] The Commission believes that the U.S. market for Empresas ADRs operates as a single market even though it is made up of several national securities exchanges and the NASD. The Commission notes that Empresas ADRs trade primarily on one U.S. exchange, the NYSE, and all of the markets on which or through which these ADRs cold trade are linked together by the Intermarket Trading System ("ITS").[17] Accordingly, the Commission believes that the U.S. ADR market for Empresas is substantially the price-discovery market for Empresas securities (*i.e.*, stocks and ADRs) and, therefore, is the instrumental market for purposes of deterring and detecting potential manipulation or other abusive trading strategies in conjunction with transactions in the overlying ADR options market.[18] Since both the Amex, the U.S. exchanges on which Empresas ADRs trade, and the NASD are members of the ISG, the Commission believes that there is an effective surveillance sharing arrangement to permit the exchanges and the NASD to adequately investigate any potential manipulations of the ADR options or their underlying securities.

The Commission also notes that the Amex will review the world-wide trading volume for Empresas stock and ADRs to ensure that the primary market for Empresas securities continues to be the U.S. ADR market. Specifically, the Amex has agreed to continue reviewing the percentage of world-wide trading volume in Empresas securities that occurs in the U.S. ADR market. If the average daily trading volume in Empresas stock and ADRs occurring in the U.S. ADR market falls below 30% of world-wide volume, the Amex represents that it will not open for trading any additional series of options on Empresas ADRs unless it has in place a comprehensive surveillance sharing agreement with the Mexican Stock Exchange.[19] Accordingly, the Commission believes that these requirements ensure that if the U.S. ADR market ceases to be the primary market for Empresas securities, the Amex will either obtain the necessary surveillance sharing agreements or "wind down" trading in the product.[20]

It is therefore ordered, pursuant to section 19(b)(2) of the Act,[21] that portions of the proposed rule change (File No. SR–Amex-91–26) related to the listing of options on ADRs representing the shares of Empresas are approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[22]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28479 Filed 11–18–93; 8:45 am]

BILLING CODE 8010-01-M

[14] See supra note 8.

[15] See also Securities Exchange Act Release No. 26653 (March 21, 1989), 54 FR 12705 (order approving the trading of options on the International Market Index ("IMI"), an index comprised of ADRs traded in the United States based on foreign securities). In this approval order, the Commission specifically required that there be comprehensive surveillance sharing agreements in place between the Amex and the foreign exchanges on which the securities underlying the ADRs trade so that a substantial percentage of the Index was covered by comprehensive surveillance sharing agreements. In particular, 78% of the weight of the Index was covered by comprehensive surveillance sharing agreements. For the remaining 22% of the Index, the Commission further recommended that the Amex obtain comprehensive surveillance agreements with the exchanges on which the foreign securities underlying the ADRs trade.

[16] From July, 1993 through September, 1993, the average daily trading volume on the Mexican Stock Exchange for the common shares of Empresas was 129,767 shares (46.87%) and the ADR average daily trading volume was 147,109 ADRs (53.13%). *See* letter from Claire P. McGrath, Managing Director and Special Counsel, Derivative Securities, Amex, to Richard Zack, Branch Chief, Division, Commission, dated November 8, 1993. The Amex further represents that the Mexican Stock Exchange and the U.S. ADR market are the predominate markets for Empresas securities. Telephone conversation between Claire P. McGrath, Managing Director and Special Counsel, Derivative Securities, Amex, and Monica Michelizzi, Staff Attorney, Division, Commission, on November 5, 1993.

[17] ITS is a communications system designed to facilitate trading among competing markets by providing each market with order routing capabilities based on current quotation information. The system links the participant markets and provides facilities and procedures for: (1) The display of composite quotation information at each participant market, so that brokers are able to determine readily the best bid and offer available from any participant for multiply-traded securities; (2) efficient routing of orders and sending administrative messages (on the functioning of the system) to all participating markets; (3) participation, under certain conditions, by members of all participating markets in opening transactions in those markets; and (4) routing orders from a participating market to a participating market with a better price. The exchanges on which Empresas ADRs trade are ITS participant markets. The NASD's Computer Assisted Execution System links NASD market makers, for order routing and execution purposes to ITS for Empresas ADRs.

[18] Although the Amex has requested the approval to list and trade options on ADRs representing the shares of Sony, Toyota, and Vitro, the Amex does not have in place surveillance sharing agreements, covering these products, with either the Tokyo Stock Exchange, which is the primary market for trading in Sony or Toyota securities, or the Mexican Stock Exchange, which is the primary market for trading in Vitro securities. See *supra* note 3. Accordingly, the Commission cannot at this time approve proposals to list options on Sony, Toyota, or Vitro ADRs.

[19] November 2nd Letter, *supra* note 3.

[20] *Id.*

[21] 15 U.S.C. 78s(b) (1988).

[22] 17 CFR 200.30–3(a)(12) (1993).

[Release No. 34–33190 ; File No. SR–AMEX–93–35]

Self-Regulatory Organizations; Notice of Filing of Proposed Rule Change by the American Stock Exchange, Inc. Relating to a Proposed Amendment to the Listing Guidelines Applicable to Equity Linked Term Notes ("ELNs")

November 12, 1993.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on November 12, 1993, the American Stock Exchange, Inc. ("AMEX" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the AMEX. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend section 107B ("Equity Linked Term Notes") of the AMEX Company Guide ("Guide") to provide alternative criteria with respect to the market capitalization and trading volume standards applicable to underlying linked securities. The text of the proposed rule change is available at the Office of the Secretary, the AMEX, and at the Commission.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the AMEX included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The AMEX has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

On May 20, 1993, the Commission approved the Exchange's proposed amendments to section 107 of the Guide to provide for the listing and trading of Equity Linked Term Notes ("ELNs").[1]

ELNs are intermediate term (two to seven years), non-convertible, hybrid debt securities, the value of which is linked to the performance of a highly capitalized, actively traded common stock. ELNs may provide for periodic interest payments to holders based on fixed or floating rates, or they may be structured as "zero coupon" instruments with no payments to holders prior to maturity.[2] ELNs may be subject to a "cap" on the maximum principal amount to be repaid to holders upon maturity, and they may feature a "floor" on the minimum principal amount paid to holders upon maturity. A specific issue of ELNs, for example, may provide holders with a fixed semi-annual interest payment, a cap of 135% of the issuance price on the maximum amount to be paid upon maturity, and no minimum floor on the principal to be repaid at maturity. Another issue of ELNs might offer lower annual payments based upon a floating rate and a minimum floor principal repayment of 75% of the issuance price. As may be seen, the flexibility available to an issuer of ELNs permits the creation of securities which offers investors the opportunity to more precisely focus on a specific investment strategy. The Exchange currently lists four ELNs issues.[3]

ELNs conform to the general listing criteria under Section 107A of the Guide, which provide that issues have: (1) A minimum public distribution of one million trading units and a minimum of 400 holders; (2) an aggregate market value of at least $20 million; (3) cash settlement in U.S. dollars and a redemption price of at least three dollars where the instrument contains such provisions; and (4) assets of at least $100 million, stockholders' equity of at least $10 million, and pre-tax income of at least $750,000 in the last fiscal year or in two of the three prior fiscal years.[4] ELNs also conform to the special listing criteria of Section 107B of the Guide which provide that: (1) Each issuer have a tangible net worth of at least $150 milion; (2) the total original issue price of the particular issue of ELNs combined with all of the issuer's other ELNs listed on a national securities exchange or traded through the National Association of Securities Dealers, Inc. Automated Quotation system not be greater than 25% of the issuer's tangible net worth at the time of issuance; (3) each underlying linked stock must have a market capitalization of at least $3 billion, and a trading volume in the 12-month period preceding listing (in all markets in which the underlying security is traded) of at least 2.5 million shares; (4) the issuer of the underlying linked stock must be a U.S. reporting company under the Act; and (5) the issuance of ELNs relating to an underlying linked stock may not exceed 5% of the total outstanding shares of such stock.

The Exchange now proposes to amend Section 107B of the Guide to provide alternative criteria with respect to the market capitalization and trading volume standards applicable to an underlying linked security. The Exchange proposes that the underlying linked security either: (1) Have a market capitalization of at least $1.5 billion and a trading volume of 20 million or more shares over the 12-month period prior to listing; or (2) meet the current standard of at least $3 billion in market capitalization and trading volume of at least 2.5 million shares over the 12-month period prior to listing.

The Exchange believes that the proposed amendment will benefit investors by expanding the number of securities that may be linked to ELNs, thereby providing investors with enhanced investment flexibility. The Exchange further believes that the proposed alternative standard for the market capitalization and trading volume guideline applicable to underlying linked securities is a relatively minor change to the ELNs listing criteria which will not affect the market for the underlying linked stocks. The underlying linked stocks will continue to be extremely liquid securities issued by large, well capitalized corporations. Moreover, the remaining guidelines of Section 107B of the Guide with respect to ELNs and underlying linked securities will be unaffected by the proposed amendment. The Exchange therefore believes, that the establishment of an alternative market capitalization and enhanced trading volume standard should not have any adverse impact upon the market for the stocks that are linked to ELNs listed under the new criteria.

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act, in general, and furthers the objectives of Section 6(b)(5) in particular, in that it is designed to prevent fraudulent and manipulative

[1] See Securities Exchange Act Release No. 32343 (May 20, 1993), 58 FR 30833.

[2] The Exchange has agreed to notify the Commission if an issuer of ELNs provides for periodic interest payments to holders based on a floating rate. *ID.*

[3] The Exchange presently lists two issues of ELNs linked to the common stock of Oracle Systems, Inc., and one each linked to the common stock of Digital Equipment Corporation and Microsoft Corporation.

[4] Issuers not meeting these financial criteria must have assets in excess of $200 million and stockholders' equity of in excess of $10 million, or, alternatively, assets in excess of $100 million and stockholders' equity of at least $20 million.

acts and practices, to promote just and equitable principles of trade, and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

(B) Self-Regulatory Organization's Statement on Burden on Competition

The AMEX does not believe that the proposed rule change will impose any inappropriate burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to the self-regulatory organization consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC. Copies of such filing will also be available for inspection and copying at the principal office of the AMEX. All submissions should refer to File No. SR–AMEX–93–35 and should be submitted by December 10, 1993.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[5]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28480 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

[Release No. 34–33196; International Series Release No. 613; File No. SR–CBOE–92–15]

Self-Regulatory Organizations; Order Granting Partial Approval of a Proposed Rule Change by the Chicago Board Options Exchange, Inc., Relating to Listing Options on a Certain Specific American Depositary Receipt

November 12, 1993.

I. Introduction

The Chicago Board Options Exchange, Inc. ("CBOE" or "Exchange"), filed with the Securities and Exchange Commission ("Commission"), on August 10, 1992, pursuant to section 19(b) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] a proposed rule changes to list and trade options on American Depositary Receipts ("ADRs") representing the shares of Empresas ICA Sociedad Controladora S.A. de C.V ("Empresas").[3]

The proposed rule change was published for comment in Securities Exchange Act Release No. 31122 (August 28, 1992), 57 FR 40707 (September 4, 1992). No comments were received on the proposed rule change.

II. Description

On November 27, 1992, the Commission approved a CBOE proposal to list and trade ADR options where the underlying foreign security is subject to a comprehensive surveillance sharing agreement and the underlying ADR meets or exceeds the Exchange's established uniform options listing standards.[4] First, the ADR Approval Order provides that for ADR options to be eligible for listing and continued trading, the CBOE must have comprehensive surveillance sharing agreements in place with the foreign exchanges that serve as the primary markets for the foreign securities underlying the ADRs, unless the Commission otherwise approves the options' listing without an agreement. Second, the CBOE's initial listing standards require that the ADRs underlying the Exchange-listed options have a "float" of 7,000,000 ADRs outstanding, 2,000 shareholders, trading volume of at least 2,400,000 over the prior twelve month period, and a minimum price of $7½ for a majority of the business days during the preceding three month period. Moreover, options on ADRs must meet or exceed the maintenance criteria for continued listing under the CBOE rules. Those criteria require that the ADRs underlying Exchange-listed options maintain a "float" of 6,300,000 ADRs, 1,600 shareholders, trading volume of at least 1,800,000 over the prior twelve month period, and a minimum price of $5 on a majority of the business days during the preceding six month period. Additionally, the ADR Approval Order requires the CBOE to make reasonable inquiry to evaluate the securities underlying the ADRs to ensure that these securities are generally consistent with the above-noted listing requirements.

Furthermore, the CBOE options initial listing standards require that the ADR underlying an ADR option be registered and listed on a national securities exchange or traded through the facilities

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[5] 17 CFR 200.30–3(a)(12) (1992).

[1] 15 U.S.C. 78s(b) (1988).

[2] 17 CFR 240.19b–4(1993).

[3] The CBOE also requested approval to list and trade options on ADRs representing the shares of British Telecommunications PLC ("BT"), Societe Nationale Elf Aquitane ("Elf"), TOTAL, Waste Management International PLC ("WMI"), Wellcome PLC ("Wellcome"), and Vitro Sociedad Anonima ("Vitro"). With respect to ADR options overlying shares of BT, Elf, WMI, and Wellcome, the underlying foreign securities primarily trade on foreign exchanges with which the CBOE has in place comprehensive surveillance sharing agreements. Under current Exchange rules, the CBOE has the authority to list and trade ADR options where the option meets Exchange options listing standards and the CBOE has a comprehensive surveillance sharing agreement with the primary exchange trading the underlying foreign security. Accordingly, the CBOE does not need additional authority to list these ADR options. *See* Securities Exchange Releases No. 31531 (November 27, 1992), 57 FR 57250 (December 3, 1992) ("ADR Approval Order"). With respect to ADR options overlying shares of Vitro, seventy percent of the world-wide trading volume in the foreign securities underlying Vitro ADRs occurs on the Bolsa Mexicana de Valores ("Mexican Stock Exchange"). *See* Letter from Joseph Levin, Vice President, Research and Development, CBOE, to Monica C. Michelizzi, Staff Attorney, Division of Market Regulation ("Division"), Commission, dated September 23, 1993 ("September 23rd Letter"). Because the Mexican Stock Exchange is the primary home market for trading in shares of Vitro and there is not a surveillance sharing agreement between the Mexican Stock Exchange and the CBOE, the Commission cannot at this time given the CBOE the authority to list options on ADRs representing the shares of Vitro. See discussion at *infra* notes 15 through 17 and accompanying text.

[4] ADR Approval order, *supra* note 3. A comprehensive surveillance sharing agreement provides, among other things, for the exchange of market trading activity, clearing activity, and the identity of the ultimate purchaser or seller of the securities traded.

of a national securities association and be reported as a national market system security. The issuers of the ADRs also must be in compliance with any other applicable requirements of the Act.

The current proposal would authorize the CBOE to list and trade options on ADRs representing the shares of Empresas, even though the CBOE does not have a surveillance sharing agreement with the primary exchange on which the foreign securities underlying the ADRs trade. The foreign securities underlying Empresas ADRs trade primarily on the Mexican Stock Exchange, while the ADRs trade primarily on the New York Stock Exchange ("NYSE").[5]

Although the CBOE does not have a surveillance sharing agreement with the Mexican Stock Exchange, the CBOE does not believe that this will impair its ability to detect or deter any potential manipulations of the market in Empresas ADR options because the dominant underlying market for the ADR options is the U.S. ADR market, rather than the Mexican Stock Exchange.[6] Since the CBOE, the NASD, and the U.S. exchanges on which Empresas ADRs trade are members of the Intermarket Surveillance Group ("ISG"), the CBOE believes that it has the ability to conduct adequate surveillance of trading in Empresas ADR options.[7]

[5] Although the NYSE is the primary market for Empresas ADRs, the ADRs also trade in the United States on the Boston Stock Exchange, Inc. ("BSE"), the Chicago Stock Exchange, Inc. ("CHX"), the Cincinnati Stock Exchange, Inc. ("CSE"), the Pacific Stock Exchange, Inc. ("PSE"), the Philadelphia Stock Exchange, Inc. ("Phlx"), and through the National Association of Securities Dealers, Inc. ("NASD"), Automatic Quotation System ("NASDAQ").

[6] The CBOE represents that for the three month period ending August 31, 1993, 50% or more of the world-wide trading volume (on a share equivalent basis) in Empresas occurred in the U.S. ADR market. The CBOE further represents that if the trading volume in the U.S. market for Empresas ADRs falls below 30% of the world-wide trading volume for Empresas ADRs and stock in any subsequent three month period, the Exchange will not open for trading any additional series of options on Empresas ADRs unless the CBOE has in place a comprehensive surveillance sharing agreement with the primary exchange in the home country where the foreign security underlying the ADR is traded or the Commission otherwise authorizes the listing. *See* September 23rd Letter, *supra* note 3.

[7] ISG was formed on July 14, 1983 to, among other things, coordinate more effectively surveillance and investigative information sharing arrangements in the stock and options markets. See Intermarket Surveillance Group Agreement, July 14, 1983. The most recent amendment to the ISG Agreement, which incorporates the original agreement and all amendments made thereafter, was signed by ISG members on January 29, 1990. See Second Amendment to the Intermarket Surveillance Group Agreement, January 29, 1990. The members of the ISG are: the American Stock Exchange, Inc. ("Amex"), the BSE, the CBOE, the CHX, the CSE, the NASD, the NYSE, the PSE, and the Phlx.

III. Discussion

The Commission finds the portions of the proposed rule change related to the listing of options on ADRs representing shares of Empresas are consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, the requirements of section 6(b)(5).[8] Specifically, the Commission finds that allowing options to trade on ADRs representing the shares of Empresas, among other things, gives investors a better means to hedge their positions in the ADRs, as well as enhanced market timing opportunities.[9] Further, the pricing of the ADRs underlying Empresas ADR options may become more efficient and market makers in these ADRs, by virtue of enhanced hedging opportunities, may be able to provide deeper and more liquid markets.[10] In sum, options on ADRs likely engender the same benefits to investors and the market place that exist with respect to options on common stock.[11]

The Commission also believes that it is appropriate to permit the CBOE to list and trade options on Empresas ADRs given that these options will be subject to specific requirements related to the protection of investors. First, CBOE rules require that the ADRs underlying these options meet the CBOE's uniform options listing standards in all respects. As described above, this would include the initial and maintenance criteria. These criteria ensure, among other things, that the underlying ADRs will maintain adequate price and float to prevent the ADR options from being readily susceptible to manipulation.

Second, the ADR Approval Order requires that the CBOE make a reasonable inquiry to evaluate Empresas securities to ensure that these securities are generally consistent with the requirements set forth in the Exchange's options listing standards. In the ADR Approval Order, the Commission recognized that in some cases, an ADR underlying an option could meet the options listing standards while the foreign security on which the ADR is based may not meet these standards in every respect. For example, in the case of ADRs overlying certain foreign securities, one ADR could represent several shares of a specific stock. For this reason, it is possible that the price of the ADR will meet exchange listing standards even though the market price of the foreign security underlying the ADR may be less than the CBOE standard. The Commission believes, however, that requiring the CBOE to review the securities underlying Empresas ADRs to ensure that they are generally consistent with the Exchange's options listing standards, along with other market safeguards, will adequately protect investors from the possibility that these ADR options can be potentially manipulated.[12]

Third, the CBOE has in place an adequate mechanism for providing for the exchange of the surveillance information necessary to adequately detect and deter market manipulation or trading abuses involving Empresas ADR options. Although the CBOE does not have an comprehensive surveillance sharing agreement with the Mexican Stock Exchange, the Commission believes that this does not impair the ability of the CBOE to detect or deter manipulation since the majority of the trading activity in these Mexican securities occurs in the U.S. ADR market. The Commission notes that the CBOE, the U.S. exchanges on which Empresas ADRs trade, and the NASD are members of the ISG, which will provide for the exchange of necessary surveillance information concerning trading activity in the Empresas ADR options, and the respective underlying ADR market.[13]

As a general matter, the Commission believes that the existence of a surveillance sharing agreement that effectively permits the sharing of information between an exchange proposing to list an equity option, such as options on Empresas ADRs, and the exchange trading the stock underlying the equity option is necessary to detect and deter market manipulation and

[8] 15 U.S.C. 78f(b)(5) (1988).

[9] For example, if an investor wants to invest in ADRs but does not have sufficient cash available until a future date, he can purchase an ADR option now for less money and exercise the option to purchase the ADRs at a later date.

[10] See *e.g.* Report of the Special Study of the Options Markets to the Securities and Exchange Commission, 96th Cong., 1st Sess. (Comm. Print No. 96–IFC3, December 22, 1978).

[11] Pursuant to section 6(b)(5) of the Act, the Commission must predicate approval of any new securities product upon a finding that the introduction of such new products is in the public interest. Such a finding would be difficult for a derivative instrument that served no hedging or other economic function, because any benefits that might be derived by market participants likely would be outweighed by the potential for manipulation, diminished public confidence in the integrity of the markets, and other valid regulatory concerns.

[12] For example, we would expect the Exchange to consider delisting an option on an ADR if the price and public float of the underlying security did not meet trading or size maintenance standards, or if the security underlying the ADR failed to meet other standards that raised manipulative concerns.

[13] See *supra* note 7.

other trading abuses. In particular, the Commission notes that surveillance sharing agreements provide an important deterrent to manipulation because they facilitate the availability of information needed to fully investigate a potential manipulation if it were to occur. These agreements are especially important in the context of derivative products based on foreign securities because they facilitate the collection of necessary regulatory, surveillance and other information from foreign jurisdictions.

In the context of ADRs, the Commission believes that, in most cases, the relevant underlying equity market is the primary market on which the security underlying the ADR trades. This is because, in most cases, the market for the security underlying the ADR generally is larger in comparison to the ADR market, both in terms of share volume and the value of trading. Because of the additional leverage provided by an option on an ADR, the Commission generally believes that having a comprehensive surveillance sharing agreement in place, between the exchange where the ADR option trades and the exchange where the foreign security underlying the ADR primarily trades, will ensure the integrity of the marketplace.[14] The Commission further believes that the ability to obtain relevant surveillance information, including, among other things, the identity of the ultimate purchasers and sellers of securities, is an essential and necessary component of a comprehensive surveillance sharing agreement.

In the present case, however, the Commission finds that the market for Empresas ADRs is larger than the market for the underlying foreign securities. Specifically, approximately 53% of the world-wide trading volume in Empresas stock and ADRs occurs in the U.S. ADR market, which consists of the NYSE, the BSE, the CHX, the CSE, the PSE, the Phlx, and NASDAQ.[15] The Commission believes that the U.S. market for Empresas ADRs operates as a single market even though it is made up of several national securities exchanges and the NASD. The Commission notes that Empresas ADRs trade primarily on one U.S. exchange, the NYSE, and all of the markets on which or through which these ADRs could trade are linked together by the Intermarket Trading System ("ITS").[16] Accordingly, the Commission believes that the U.S. ADR market for Empresas is substantially the price-discovery market for Empresas securities (*i.e.*, stocks and ADRs) and, therefore, is the instrumental market for purposes of deterring and detecting potential manipulation or other abusive trading strategies in conjunction with transactions in the overlyng ADR options market.[17] Since both the CBOE, the U.S. exchanges on which Empresas ADRs trade, and the NASD are members of the ISG, the Commission believes that there is an effective surveillance sharing arrangement to permit the exchanges and the NASD to adequately investigate any potential manipulations of the ADR options or their underlying securities.

The Commission also notes that the CBOE will review the world-wide trading volume for Empresas stock and ADRs to ensure that the primary market for Empresas securities continues to be the U.S. ADR market. Specifically, the CBOE has agreed to continue reviewing the percentage of world-wide trading volume in Empresas securities that occurs in the U.S. ADR market. If the average daily trading volume in Empresas stock and ADRs occurring in the U.S. ADR market falls below 30% of world-wide trading volume, the CBOE represents that its will not open for trading any additional series of options on Empresas ADRs unless it has in place a comprehensive surveillance sharing agreement with the Mexican Stock Exchange.[18] Accordingly, these requirements ensure that if the U.S. ADR market ceases to be the primary market for Empresas securities, the CBOE will either obtain the necessary surveillance sharing agreements or "wind down" trading in the product.[19]

It is therefore ordered, pursuant to section 19(b)(2) of the Act,[20] that portions of the proposed rule change (File No. SR–CBOE–92–15) related to the listing of options on ADRs representing the shares of Empresas are approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[21]

Margaret H. McFarland,

Deputy Secretary.

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[14] See also Securities Exchange Act Release No. 26653 (March 21, 1989), 54 FR 12705 (order approving the trading of options on the International Market Index ("IMI"), an index comprised of ADRs traded in the Untied States based on foreign securities). In this approval order, the Commission specifically required that there be comprehensive surveillance sharing agreements in place between the American Stock Exchange ("Amex") and the foreign exchanges on which the securities underlying the ADRs trade so that a substantial percentage of the Index was covered by comprehensive surveillance sharing agreements. In particular, 78% of the weight of the Index was covered by comprehensive surveillance sharing agreements. For the remaining 22% of the Index, the Commission further recommended that the Amex obtain comprehensive surveillance agreements with the exchanges on which the foreign securities underlying the ADRs trade.

[15] From June, 1993 through August, 1993, the average daily trading volume on the Mexican Stock Exchange for the common shares of Empresas was 136,121 shares (46.61% and the ADR average daily trading volume was 155,923 ADRs (53.39%). See September 23rd Letter, *supra* note 3. The CBOE further represents that the Mexican Stock Exchange and the U.S. ADR market are the predominate markets for Empresas securities. Telephone conversation between Joseph Levin, Vice President, Research and Development, CBOE, and Monica Michelizzi, Staff Attorney, Division, Commission, on October 22, 1993.

[16] ITS is a communications system designed to facilitate trading among competing markets by providing each market with order routing capabilities based on current quotation information. The system links the participant markets and provides facilities and procedures for: (1) The display of composite quotation information at each participant market, so that brokers are able to determine readily the best bid and offer available from any participant for multiply trading securities; (2) efficient routing of orders and sending administrative messages (on the functioning of the system) to all participating markets; (3) participation, under certain conditions, by members of all participating markets in opening transactions in those markets; and (4) routing orders from a participating market to a participating market with a better price. The exchanges on which Empresas ADRs trade are ITS participant markets. The NASD's Computer Assisted Execution System links NADs market makers, for order routing and execution purposes, to ITS for Empresas ADRs.

[17] Although the CBOE has requested the approval to list and trade options on ADRs representing the shares of Vitro, the CBOE does not have in place a surveillance sharing agreement with the Mexican Stock Exchange, which is the primary market for trading in Vitro securities. In addition, the U.S. ADR market for Vitro Securities. See *supra* note 3. Accordingly, the Commission cannot at this time approve proposals to list Vitro ADR options.

[18] September 23rd Letter, *supra* note 1.

[19] *Id.*

[20] 15 U.S.C. 78s(b)(2) (1988).

[21] 17 CFR 200.30–3(a)(12) (1993).

[Release No. 34–33192; File No. SR–CBOE–93–36]

Self-Regulatory Organizations; Filing of Proposed Rule Change by the Chicago Board Options Exchange, Inc. Relating to Options on the S&P/Barra Growth Index and the S&P/Barra Value Index

November 12, 1993.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on September 9, 1993, the Chicago Board Options Exchange, Inc. ("CBOE" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the CBOE. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The CBOE proposes to list and trade options on the S&P/Barra Growth Index ("Growth Index") and the S&P/Barra Value Index ("Value Index"). (The Growth Index and Value Index are sometimes hereinafter referred to as the "Indexes".) The text of the proposed rule change is available at the Office of the Secretary, the CBOE, and at the Commission.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the CBOE included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The CBOE has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

The purpose of the proposed rule change is to permit the Exchange to list and trade options based on the Value Index and the Growth Index (sometimes hereinafter referred to as "Value options" and "Growth options"). The Indexes are maintained by Barra, Inc. ("Barra") pursuant to a license agreement between Barra and Standard & Poor's ("S&P"). As further described below, the Value Index and Growth Index represent a partition of the S&P 500 Stock Index ("S&P 500") and, like options on the S&P 500 ("SPX options"), Value options and Growth options will be cash-settled, European-style [1] and A.M.-settled.

A. Index Design, Maintenance and Calculation

The Indexes are constructed by sorting the stocks in the S&P 500 on the basis of their book-to-price ratios as determined by Barra. The sort is performed twice per year, based on end-of-day information for November 30 and May 31. Starting with the company with the highest book-to-price ratio, companies are added to the Value Index until that Index contains 50 percent of the market capitalization of the S&P 500. The Growth Index is composed of the remaining companies in the S&P 500. The partition of the S&P 500 using November 30 information becomes effective as of January 1 of the following year; the partition of the S&P 500 using May 31 information becomes effective July 1 of the same year.

The Indexes are updated on an ongoing basis to reflect changes in the composition of the S&P 500 and adjustments to stocks in the S&P 500. A stock that is added to the S&P 500 is assigned to the Growth Index if its book-to-price ratio is less than the cutoff ratio determined at the most recent semi-annual resorting of the Indexes; otherwise, the stock is added to the Value Index. To maintain continuity in either Index following the addition of a new component stock or an adjustment of existing component stock, the divisor of the Index is adjusted.

Like the S&P 500, the Indexes are capitalization-weighted, and the methodology used to calculate them is identical to the methodology used to calculate the S&P 500. The level of each Index is calculated as follows:

$$\text{Index Level} = \frac{\text{Current Market Value}}{\text{Adjusted Base Period Market Value}} \times 10$$

$$\text{Adjusted Base Period Market Value} = \frac{\text{Current Market Value After Adjustments}}{\text{Current Market Value Before Adjustments}} \times \text{Previous Base Period Market Value}$$

The numeric value of each Index was established at 10 as of the close of the market on December 31, 1974, and the Growth Index is currently at about 60 and the Value Index is currently at about 70.

The Indexes are calculated continuously by S&P or its designee, and their values will be disseminated by the Options Price Reporting Authority no less often than every fifteen seconds. S&P will also calculate the exercise settlement value for each expiring series of Value options and Growth options, and will make these values available to CBOE for use by the Options Clearing Corporation in effecting settlement of exercises and assignments of the options. Value options and Growth options will be A.M.-settled. Each exercise settlement value will therefore be an "opening" settlement, i.e., a value derived from first reported sale (opening) prices of the securities in the applicable Index on the last day of trading in the securities prior to expiration, or from the last reported sale prices of any securities that do not open for trading on that day.

B. Growth and Value Option Trading

The Exchange is proposing in this proposed rule change to trade "regular" Growth and Value options and full-value and reduced-value LEAPS on the Growth and Value Indexes. Chapter XXIV of the CBOE's Rules, as modified by this rule change, will govern trading of Growth and Value options.

(1) *Reporting Authority.* The existing Interpretation to Rule 24.1 that identifies the "reporting authority" for each index underlying options traded on the Exchange is amended to specify that the reporting authority for the Indexes is S&P.[2]

(2) *Current Index Value.* The "current index value" for regular Growth and Value options, and for full-value LEAPS on the Indexes, will be equal to the levels of the respective Indexes.[3] The "current index value" for reduced-value LEAPS Growth and Value options will be one-tenth of the value of the related regular options.

[1] European-style options may only be exercised during some specified period immediately prior to expiration.

[2] The Interpretation is also amended to reflect that S&P recently began to operate as a division rather than as a subsidiary of McGraw-Hill.

[3] The "current index value" is defined in CBOE Rule 24.1(g) (as amended by File No. SR-CBOE-93-05) for regular options to mean "the level of the underlying index reported by the reporting authority for the index, or any multiple or fraction of such reported level specified by the Exchange."

(3) *Exercise and Settlement.* Rule 24.9 will specify that Growth and Value options will have European-style exercise and will be "A.M.-settled index options." As with other non-Flexible Exchange options and non-Quarterly Index Expiration ("QIX") options, regular and LEAPS Growth and Value options will expire on the Saturday following the third Friday of the expiration month, and the last day for trading in an expiring series will be the second business day (ordinarily a Thursday) preceding the expiration date.

(4) *Position Limits.* The Exchange is proposing to establish position limits for Growth and Value options equal to 125,000 contracts on the same side of the market, with no more than 75,000 contracts in the series with the nearest expiration date. These limits are roughly equivalent, in dollar terms, to the basic limits[4] applicable to options on the S&P 500 index and the S&P 100 index (25,000 contracts on the same side of the market, with no more than 15,000 contracts in the series with the nearest expiration date) and to the limits applicable to options on the Russell 2000 index (50,000 contracts on the same side of the market, with no more than 30,000 contracts in the series with the nearest expiration date).[5] Similarly, the Exchange is proposing to establish 375,000 contracts on the same side of the market as the maximum position size that will be eligible for treatment under the CBOE's hedge exemption rule provisions.[6] Paragraph 24.4(a) and Interpretation .01 to Rule 24.4 are amended to reflect these proposals.

(5) *Strike Prices.* Interpretations .01 and .05 to Rule 24.9, which describe the procedures for adding and deleting strike prices for index options, will apply to Growth and Value options. Paragraph (a) of Interpretation .01 is amended to provide that the minimum interval between strike prices for Growth and Value options will be $2.50, as it is for other index options with strike prices less than $200.00.

(6) *Expiration Cycle.* Existing Rule 24.9(a)(2), which describes the expiration months for regular index options, will apply to regular Growth and Value options, and regular Growth and Value options will have up to three near-term consecutive expiration months plus up to three farther-out expiration months at three-month intervals. Existing Rule 24.9(b), which describes the expiration months for LEAPS index options, will apply to LEAPS Growth and Value options.

C. Inclusion of Rules Revised Disclaimer of Liability on Behalf of S&P and Barra

The CBOE has agreed with S&P to revise the disclaimer of liability on behalf of S&P that is currently in the CBOE's Rules so that it covers Barra as well as S&P, and the Growth Index and Value Index as well as the S&P 500 and S&P 100 indexes.

D. Statutory Basis

The Exchange believes that the proposed rule change is consistent with section 6(b) of the Act, in general, and furthers the objectives of section 6(b)(5) in particular, in that it will permit trading in Growth and Value options and LEAPS pursuant to rules designed to prevent fraudulent and manipulative acts and practices and to promote just and equitable principles of trade, and thereby will provide investors with the ability to invest in options based on two additional indexes.

(B) Self-Regulatory Organization's Statement on Burden on Competition

The CBOE does not believe that the proposed rule change will impose any inappropriate burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC. Copies of such filing will also be available for inspection and copying at the principal office of the CBOE. All submissions should refer to File No. SR–CBOE–93–36 and should be submitted by December 10, 1993.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[7]

Margaret H. McFarland,

Deputy Secretary.

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[4] The CBOE's rules set out somewhat higher position limits for A.M.-settled options on the S&P 500 index and for QIXs on the S&P 500 index and the S&P 100 index.

[5] The S&P 500 index level is currently at about 460 and the S&P 100 at about 425, so that a position of 25,000 option contracts overlying either of these indexes would have a dollar value somewhat greater than a position of 125,000 option contracts overlying either the Growth Index or the Value Index. The Russell 2000 index level is currently at about 245, so that a position of 50,000 option contracts overlying that index would also have a dollar value somewhat greater than a position of 125,000 option contracts overlying either the Growth Index or the Value Index.

[6] The maximum position that is eligible for hedge exemption treatment under the CBOE's rules (other than positions in SPX options, which are subject to a higher exemption limit) is 75,000 contracts on the same side of the market. In dollar terms, a position of 75,000 option contracts on the S&P 100 index would have a value somewhat higher than the value of 375,000 option contracts on either the Growth Index or the Value Index.

[7] 17 CFR 200.30–3(a)(12) (1992).

[Release No. 34–33195; International Series Release No. 612; File No. SR–NYSE–92–26]

Self-Regulatory Organizations; Notice of Filing and Order Granting Partial Accelerated Approval to Proposed Rule Change by the New York Stock Exchange, Inc., Relating to the Listing of Options on a Certain Specific American Depositary Receipt

November 12, 1993.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on September 23, 1992, the New York Stock Exchange ("NYSE" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule

change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Rule Change

The NYSE requests Commission authorization to list and trade options on American Depositary Receipts ("ADRs") representing the shares of Empresas ICA Sociedad Controladora S.A. de C.V. ("Empresas").[1]

The text of the proposal is available at the Office of the Secretary, NYSE and at the Commission.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in Sections (A), (B) and (C) below, of the most significant aspects of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The NYSE is requesting Commission authorization to list and trade options on ADRs representing the shares of Empresas.

On November 27, 1992, the Commission approved a NYSE proposal to list and trade ADR options where the underlying foreign security is subject to a comprehensive surveillance sharing agreement and the underlying ADR meets or exceeds the Exchange's established uniform options listing standards.[2] First the ADR Approval Order provides that for ADR options to be eligible for listing and continued trading, the NYSE must have comprehensive surveillance sharing agreements in place with the foreign exchanges that serve as the primary markets for the foreign securities underlying the ADRs, unless the Commission otherwise approves the options' listing without an agreement. Second, the NYSE's initial listing standards require that the ADRs underlying the Exchange-listed options have a "float" of 7,000,000 ADRs outstanding, 2,000 shareholders, trading volume of at least 2,400,000 over the prior twelve month period, and a minimum price of $7½ for a majority of the business days during the preceding three month period. Moreover, options on ADRs must meet or exceed the maintenance criteria for continued listing under the NYSE rules. Those criteria require that the ADRs underlying Exchange-listed options maintain a "float" of 6,300,000 ADRs, 1,600 shareholders, trading volume of at least 1,800,000 over the prior twelve month period, and a minimum price of $5 on a majority of the business days during the preceding six month period. Additionally, the ADR Approval Order requires the NYSE to make reasonable inquiry to evaluate the securities underlying the ADRs to ensure that these securities are generally consistent with the above-noted listing requirements.

Furthermore, the NYSE options initial listing standards require that the ADR underlying an ADR option be registered and listed on a national securities exchange or traded through the facilities of a national securities association and be reported as a national market system security. The issuers of the ADRs also must be in compliance with any other applicable requirements of the Act.

The current proposal would authorize the NYSE to list and trade options on ADRs representing the shares of Empresas, even though the NYSE does not have a surveillance sharing agreement with the primary exchange on which the foreign securities underlying the ADRs trade. The foreign securities underlying Empresas ADRs trade primarily on the Mexican Stock Exchange, while the ADRs trade primarily on the NYSE.[3]

Although NYSE does not have a surveillance sharing agreement with the Mexican Stock Exchange, the NYSE does not believe that this will impair its ability to detect or deter any potential manipulations of the market in Empresas ADR options because the dominant underlying market of the ADR options in the U.S. ADR market, rather than the Mexican Stock Exchange.[4] The NYSE believes it has the ability to conduct adequate surveillance of trading in Empresas ADR options because the NYSE is the primary market on which Empresas ADRs trade.[5] In addition, the other U.S. exchanges on which Empresas ADRs trade, the NYSE and the NASD are members of the Intermarket Surveillance Group ("ISG"), which provides for the exchange of necessary surveillance information concerning trading activity in the Empresas ADR options, and the respective underlying ADR market.[6]

The Exchange believes that the proposed rule change is consistent with

[1] The NYSE also requested approval to list and trade options on ADRs representing the shares of Vitro Sociedad Anonima ("Vitro"). The Commission notes that less than 50% of the world-wide volume of the shares and ADRs of Vitro trade in the U.S. ADR market. *See* Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Richard L. Zack, Branch Chief, Division of Market Regulation, Commission, dated October 22, 1993 ("October 22nd Letter"). Because the primary home market for trading in shares of Vitro is the Bolsa Mexicana de Valores ("Mexican Stock Exchange") and the NYSE does not have in place a surveillance sharing agreement with that exchange, the Commission cannot at this time give the NYSE the authority to list options on ADRs representing the shares of Vitro. *See* discussion at *infra* notes 16 through 18, and accompanying text.

[2] Securities Exchange Act Release No. 31528 (November 27, 1992), 57 FR 57256 (December 3, 1992) ("ADR Approval Order"). A comprehensive surveillance sharing agreement provides, among other things, for the exchange of market trading activity, clearing activity, and the identity of the ultimate purchaser or seller of the securities traded.

[3] Although the NYSE is the primary market for Empresas ADRs, the ADRs also trade in the United States on the Boston Stock Exchange, Inc. ("BSE"), the Chicago Stock Exchange, Inc. ("CHX"), the Cincinnati Stock Exchange, Inc. ("CSE"), the Pacific Stock Exchange, Inc., ("PSE"), the Philadelphia Stock Exchange, Inc. ("Phlx"), and through the National Association of Securities Dealers, Inc. ("NASD"), Automatic Quotation System ("NASDAQ").

[4] The NYSE represents that for the three month period ending August 31, 1993, 50% or more of the world-wide trading volume (on a share equivalent basis) in Empresas occurred in the U.S. ADR market. The NYSE further represents that if the trading volume in the U.S. market for Empresas ADRs falls below 30% of the world-wide trading volume for Empresas ADRs and stock in any subsequent three month period, the Exchange will not open for trading any additional series of options on Empresas ADRs unless the NYSE has in place a comprehensive surveillance sharing agreement with the primary exchange in the home country where the foreign security underlying the ADR is traded or the Commission otherwise authorizes the listing. See October 22nd Letter, *supra* note 1.

[5] NYSE Rule 4 defines ADRs as "stock" for purpose of Exchange rules. Thus, the same "chinese wall" procedures that are applicable to the trading of options overlying stock listed on the NYSE also would apply to the trading of Empresas ADR options.

[6] ISG was formed on July 14, 1993 to, among other things, coordinate more effectively surveillance and investigative information sharing arrangements in the stock and options markets. See Intermarket Surveillance Group Agreement, July 14, 1993. The most recent amendment to the ISG Agreement, which incorporates the original agreement and all amendments made thereafter, was signed by ISG members on January 29, 1990. See Second Amendment to the Intermarket Surveillance Group Agreement, January 29, 1990. The members of the ISG are: the American Stock Exchange, Inc. ("Amex"), the BSE, the Chicago Board Options Exchange, Inc. ("CBOE"), the CHX, the CSE, the NASD, the NYSE, the PSE, and the Phlx.

Section 6(b) of the Act,[7] in general, and furthers the objectives of Section 6(b)(5), in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

(B) Self-Regulatory Organization's Statement on Burden on Competition

The NYSE believes that the proposed rule change will not impose a burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments on the proposed rule change were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has requested that the proposed rule change be given accelerated effectiveness pursuant to Section 19(b)(2) of the Act.[8]

The Commission finds the portions of the proposed rule change related to the listing of options on ADRs representing shares of Empresas are consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, the requirements of section 6(b)(5).[9] Specifically, the Commission finds that allowing options to trade on ADRs representing the shares of Empresas, among other things, gives investors a better means to hedge their positions in the ADRs, as well as enhanced market timing opportunities.[10] Further, the pricing of the ADRs underlying Empresas ADR options may become more efficient and market makers in the ADRs, by virtue of enhanced hedging opportunities, may be able to provide deeper and more liquid markets.[11] In sum, options on ADRs likely engender the same benefits to investors and the market place that exist with respect to options on common stock.[12]

The Commission also believes that it is appropriate to permit the NYSE to list and trade options on Empresas ADRs given that these options will be subject to specific requirements related to the protection of investors. First, NYSE rules require that the ADRs underlying these options meet the NYSE's uniform options listing standards in all respect. As described above, this would include the initial and maintenance criteria. These criteria ensure, among other things, that the underlying ADRs will maintain adequate price and float to prevent the ADR options from being readily susceptible to manipulation.

Second, the ADR Approval Order requires that the NYSE make a reasonable inquiry to evaluate Empresas securities to ensure that these securities are generally consistent with the requirements set forth in the Exchange's options listing standards. In the ADR Approval Order, the commission recognized that in some cases, an ADR underlying an option could meet the options listing standards while the foreign security on which the ADR is based may not meet these standards in every respect. For example, in the case of ADRs overlying certain foreign securities, one ADR could represent several shares of a specific stock. For this reason, it is possible that the price of the ADR will meet exchange listing standards even though the market price of the foreign security underlying the ADR may be less than the NYSE standard. The Commission believes, however, that requiring the NYSE to review the securities underlying Empresas ADRs to ensure that they are generally consistent with the Exchange's options listing standards, along with other market safeguards, will adequately protect investors from the possibility that these ADR options can be potentially manipulated.[13]

Third, the NYSE has in place an adequate mechanism for providing for the exchange of the surveillance information necessary to adequately detect and deter market manipulation or trading abuses involving Empresas ADR options. Although the NYSE does not have a comprehensive surveillance sharing agreement with the Mexican Stock Exchange, the Commission believes that this does not impair the ability of the NYSE to detect or deter manipulation since the majority of the trading activity in these Mexican securities occurs in the U.S. ADR market. The Commission notes that the primary market on which Empresas ADRs trade is the NYSE. Further, the other U.S. exchanges on which Empresas ADRs trade, the NYSE, and the NASD are members of the ISG, which will provide for the exchange of necessary surveillance information concerning trading activity in the Empresas ADR options, and the respective underlying ADR market.[14]

As a general matter, the Commission believes that the existence of a surveillance sharing agreement that effectively permits the sharing of information between an exchange proposing to list an equity option, such as options on Empresas ADRs, and the exchange trading the stock underlying the equity option is necessary to detect and deter market manipulation and other trading abuses. In particular, the Commission notes that surveillance sharing agreements provide an important deterrent to manipulation because they facilitate the availability of information needed to fully investigate a potential manipulation if it were to occur. These agreements are especially important in the context of derivative products based on foreign securities because they facilitate the collection of necessary regulatory, surveillance and other information from foreign jurisdictions.

In the context of ADRs, the Commission believes that, in most cases, the relevant underlying equity market is the primary market on which the security underlying the ADR trades. This is because, in most cases, the market for the security underlying the ADR generally is larger in comparison to the ADR market, both in terms of share volume and the value of trading. Because of the additional leverage provided by an option on an ADR, the Commission generally believes that having a comprehensive surveillance sharing agreement in place, between the exchange where the ADR option trades and the exchange where the foreign security underlying the ADR primarily trades, will ensure the integrity of the

[7] 15 U.S.C. 78f (1988).

[8] 15 U.S.C. 78s(b)(2) (1988).

[9] U.S.C. 78f(b)(5) (1988).

[10] For example, if an investor wants to invest in ADRs but does not have sufficient cash available until a future date, he can purchase an ADR option now for less money and exercise the option to purchase the ADRs at a later date.

[11] See *e.g.* Report of the Special Study of the Options Markets to the Securities and Exchange Commission, 96th Cong., 1st Sess. (Comm. Print No. 96–IFC3, December 22, 1978).

[12] Pursuant to section 6(b)(5) of the Act, the Commission must predicate approval of any new securities product upon a finding that the introduction of such new product is in the public interest. Such a finding would be difficult for a derivative instrument that served no hedging or other economic function, because any benefits that might be derived by market participants likely would be outweighed by the potential for manipulation, diminished public confidence in the integrity of the markets, and other valid regulatory concerns.

[13] For example, we would expect the Exchange to consider delisting an option on an ADR if the price and public float of the underlying security did not meet trading or size maintenance standards, or if the security underlying the ADR failed to meet other standards that raised manipulative concerns.

[14] See *supra* note 6.

marketplace.[15] The Commission further believes that the ability to obtain relevant surveillance information, including, among other things, the identity of the ultimate purchasers and sellers of securities, is an essential and necessary component of a comprehensive surveillance sharing agreement.

In the present case, however, the Commission finds that the market for Empresas ADRs is larger than the market for the underlying foreign securities. Specifically, approximately 53% of the world-wide trading volume in Empresas stock and ADRs occurs in the U.S. ADR market, which consists of the NYSE, the BSE, the CHX, the CSE, the PSE, the Phlx, and NASDAQ.[16] The Commission believes that the U.S. market for Empresas ADRs operates as a single market even though it is made up of several national securities exchanges and the NASD. The Commission notes that Empresas ADRs trade primarily on one U.S. exchange, the NYSE, and all of the markets on which or through which these ADRs could trade are linked together by the Intermarket Trading System ("ITS").[17] Accordingly, the Commission believes that the U.S. ADR market for Empresas is substantially the price-discovery market for Empresas securities (*i.e.*, stocks and ADRs) and, therefore, is the instrumental market for purposes of deterring and detecting potential manipulation or other abusive trading strategies in conjunction with transactions in the overlying ADR options market.[18]

Because Empresas ADRs primarily trade on the NYSE, the Commission notes that the NYSE can adequately obtain surveillance information regarding trading in the ADRs occurring on the Exchange. Further, the Commission believes that, as members of the ISG, the NYSE, the other U.S. exchanges on which Empresas ADRs trade, and the NASD have in place an effective surveillance sharing arrangement to permit the exchanges and the NASD to adequately investigate any potential manipulations of the ADR options or their underlying securities.

The Commission also notes that the NYSE will review the world-wide trading volume for Empresas stock and ADRs to ensure that the primary market for Empresas securities continues to be the U.S. ADR market. Specifically, the NYSE has agreed to continue reviewing the percentage of world-wide trading volume in Empresas securities that occurs in the U.S. ADR market. If the average daily trading volume in Empresas stock and ADRs occurring in the U.S. ADR market falls below 30% of world-wide trading volume, the NYSE represents that it will not open for trading any additional series of options on Empresas ADRs unless it has in place a comprehensive surveillance sharing agreement with the Mexican Stock Exchange.[19] Accordingly, these requirements ensure that if the U.S. ADR market ceases to be the primary market for Empresas securities, the NYSE will either obtain the necessary surveillance sharing agreements or "wind down" trading in the product.[20]

The Commission finds good cause for approving the portions of the proposed rule change relating to the listing of options on Empresas ADRs prior to the thirtieth day after the date of publication of notice of filing thereof in the **Federal Register**. The NYSE proposal to list and trade options on Empresas ADRs is identical to proposals by the CBOE and the Amex to list and trade options on Empresas ADR options.[21] The CBOE and the Amex proposals were subject to a full notice and comment period. The Commission did not receive any comments on those proposals. Further, the Commission believes that approving the NYSE proposal to list Empresas ADR options on an accelerated basis will permit the NYSE to compete on an equal basis with the CBOE and the Amex for orders in these options. Accordingly, since the Commission finds that the current proposal involves the exact same issues as the above-noted proposals, the Commission believes it is consistent with sections 19(b)(2) and 6(b)(5) of the Act[22] to approve the NYSE's proposal to list Empresas ADR options on an accelerated basis.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the proposed rule change. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC. Copies of such filing will also be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization. All submissions should refer to the file number in the caption above and should be submitted by December 10, 1993.

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[15] See *also* Securities Exchange Act Release No. 26653 (March 21, 1989), 54 FR 12705 (order approving the trading of options on the International Market Index ("IMI"), an index comprised of ADRs traded in the United States based on foreign securities). In this approval order, the Commission specifically required that there be comprehensive surveillance sharing agreements in place between the Amex and the foreign exchanges on which the securities underlying the ADRs trade so that a substantial percentage of the Index was covered by comprehensive surveillance sharing agreements. In particular, 78% of the weight of the Index was covered by comprehensive surveillance sharing agreements. For the remaining 22% of the Index, the Commission further recommended that the Amex obtain comprehensive surveillance agreements with the exchanges on which the foreign securities underlying the ADRs trade.

[16] From July, 1993 through September, 1993, the average daily trading volume on the Mexican Stock Exchange for the common shares of Empresas was 128,600 shares (46.64%) and the ADR average daily trading volume was 147,100 ADRs (53.36%). See October 22nd Letter, *supra* note 1. The NYSE further represents that the Mexican Stock Exchange and the U.S. ADR market are the predominate markets for Empresas securities. Telephone conversation between Gary Katz, NYSE, and Monica Michelizzi, Staff Attorney, Division, Commission, on October 28, 1993.

[17] ITS is a communications system designed to facilitate trading among competing markets by providing each market with order routing capabilities based on current quotation information. The system links the participant markets and provides facilities and procedures for: (1) The display of composite quotation information at each participant market, so that brokers are able to determine readily the best bid and offer available from any participant for multiply trading securities; (2) efficient routing of orders and sending administrative messages (on the functioning of the system) to all participating markets; (3) participation, under certain conditions, by members of all participating markets in opening transactions in those markets; and (4) routing orders from a participating market to a participating market with a better price. The exchanges on which Empresas ADRs trade are ITS participant markets. The NASD's Computer Assisted Execution System links NASD market makers, for order routing and execution purposes, to ITS for Empresas ADRs.

[18] Although the NYSE has requested the approval to list and trade options on ADRs representing the shares of Vitro, the NYSE does not have in place a surveillance sharing agreement with the Mexican Stock Exchange, which is the primary market for trading in Vitro securities. In addition, the U.S. ADR market for Vitro is not substantially the price discovery market for Vitro Securities. *See supra* note 1. Accordingly, the Commission cannot at this time approve proposals to list Vitro ADR options.

[19] October 22nd Letter, *supra* note 1.

[20] *Id.*

[21] Securities Exchange Act Release Nos. 31122 (August 28, 1992), 57 FR 40707 (September 4, 1992) (File No. SR-CBOE-92-15), and 31117 (August 28, 1992), 57 FR 40703 (September 4, 1992) (Amendment No. 2 to File No. SR-Amex-91-26).

[22] 15 U.S.C. 78s(b)(2) and 78f(b)(5) (1988).

It is therefore ordered, pursuant to section 19(b)(2) of the Act,[23] that the portions of the proposed rule change (SR–NYSE–92–26) related to the listing of options on ADRs representing shares of Empresas are approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[24]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28477 Filed 11–18–93; 8:45 am]

BILLING CODE 8010-01-M

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Notice and Opportunity for Hearing; Philadelphia Stock Exchange Inc.

November 12, 1993.

The above named national securities exchange has filed an application with the Securities and Exchange Commission ("Commission") pursuant to section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f–1 thereunder for unlisted trading privileges in the following security:

Chelsea GCA Realty Inc.
Common Stock, $.01 Par Value (File No. 7–11496)

This security is listed and registered on one or more other national securities exchanges and is reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before December 2, 1993, written data, views and arguments concerning the above-referenced application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such application is consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 93–28455 Filed 11–18–93; 8:45 am]

BILLING CODE 8010-01-M

[23] 15 U.S.C. 78s(b)(2) (1988).

[24] 17 CFR 200.30–3(a)(12) (1993).

[Release No. IC–19868; 812–8286]

AmSouth Mutual Funds, et al.; Notice of Application

November 15, 1993.

AGENCY: Securities and Exchange Commission ("SEC").

ACTION: Notice of application for exemption under the Investment Company Act of 1940 (the "Act").

APPLICANTS: AmSouth Mutual Funds, The Parkstone Group of Funds, BB&T Mutual Funds Group, Conestoga Family of Funds, American Performance Funds, The Society Funds, The Highmark Group, and Praxis Mutual Funds, on behalf of themselves and all other registered investment companies for which The Winsbary Company or any persons directly controlling, controlled by, or under common control with The Winsbury Company may in the future serve as principal underwriter (the "Funds"); AmSouth Bank N.A., First of America Investment Corporation, Branch Banking and Trust Company Meridian Investment Company, BancOklahoma Trust Company, AMR Investment Services, Inc., Society Asset Management, Inc., Clay Finlay Inc., The Bank of California, N.A., and MMA Capital Management (the "Advisers"); and The Winsbury Company ("Winsbury").

RELEVANT ACT SECTIONS: Order requested pursuant to section 6(c) from the provisions of sections 2(a)(32), 2(a)(35), 22(c), and 22(d) and rule 22c–1, and to amend a previous order (the "Prior Order")[1] that granted applicants exemptive relief from the provisions of sections 18(f), 18(g), and 18(i).

SUMMARY OF APPLICATION: Applicants seek to amend the Prior Order that permitted the Funds to offer up to four classes of shares. As amended, the order would permit the Funds to issue up to five classes of shares, assess a contingent deferred sales charge ("CDSC") on certain redemptions of shares of one class, and waive the CDSC in certain cases.

FILING DATES: The application was filed on February 24, 1993, and amended on July 28, 1993 and November 12, 1993.

HEARING OR NOTIFICATION OF HEARING: An order granting the application will be issued unless the SEC orders a hearing. Interested persons may request a hearing by writing to the SEC's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on December 10, 1993, and should be accompanied by proof of service on applicants, in the form or an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the SEC's Secretary.

ADDRESSES: Secretary, SEC, 450 5th Street, NW., Washington, DC 20549. Applicants, c/o Winsbury, 1900 East Dublin-Granville Road, Columbus, Ohio 43229.

FOR FURTHER INFORMATION CONTACT: James E. Anderson, Staff Attorney, at (202) 272–7027 or C. David Messman, Branch Chief, at (202) 272–3018 (Office of Investment Company Regulation, Division of Investment Management).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee from the SEC's Public Reference Branch.

Applicants' Representations

1. AmSouth Mutual Funds ("Amsouth") is a registered open-end management investment company organized as a Massachusetts business trust. AmSouth currently offers shares in nine series. Each series of AmSouth currently offers one class of shares. AmSouth Bank, N.A. is the investment adviser for each of the AmSouth series.

2. The Parkstone Group of Funds ("Parkstone") is a registered open-end management investment company organized as a Massachusetts business trust. Parkstone offers shares in fourteen series. Parkstone currently offers two classes of shares pursuant to the Prior Order. Shares of one class are held mostly through fiduciary, agency, custodial, and similar accounts of First of America Bank-Michigan N.A. and are sold without any sales charge or rule 12b–1 fee. The other class is sold subject to a front-end sales charge and a rule 12b–1 fee of up to .25% of the average annual net assets attributable to that class. First of America Investment Corporation is the investment adviser for each of the Parkstone series. Ivory & Sime International, Inc. and Ivory & Sime plc are sub-investment advisers for the Parkstone International Discovery Fund series.

3. BB&T Mutual Funds Group ("BB&T") is a registered open-end management investment company organized as a Massachusetts business trust. BB&T offers shares in six series. BB&T currently offers two classes of shares pursuant to the Prior Order. One

[1] The ASO Outlook Group, *et al.*, Investment Company Act Release Nos. 19177 (Dec. 22, 1992) (notice) and 19217 (Jan. 19, 1993) (order).

class is sold without any sales charge or rule 12b–1 fee. The other class is subject to a rule 12b–1 distribution fee at an annual rate of up to .50% of the average daily net assets attributable to such class, and in certain cases, a front-end sales charge. Branch Banking and Trust Company is the investment adviser for each of the BB&T series.

4. Conestoga Family of Funds ("Conestoga") is a registered open-end management investment company organized as a Massachusetts business trust. Conestoga offers shares in seven series. Each series of Conestoga currently offers one class of shares. Conestoga has not adopted a rule 12b–1 plan, but purchases of certain series of Conestoga are subject to a front-end sales charge. Meridian Investment Company is the investment adviser for each of the Conestoga series.

5. American Performance Funds ("American") is a registered open-end management investment company organized as a Massachusetts business trust. American offers shares in seven series. Each series of American currently offers one class of shares. Purchases of certain series are subject to a front-end sales charge and American has adopted a rule 12b–1 plan pursuant to which shareholders pay a distribution fee at an annual rate of up to .25% of the average daily net assets of the series. BancOklahoma Trust Company and AMR Investment Services each serve as the investment adviser for certain series of American.

6. The Society Funds ("Society") is a registered open-end management investment company organized as a Massachusetts business trust. Society currently offers shares in ten series. Each series of Society currently offers one class of shares. Society has not adopted a rule 12b–1 plan, but certain series are subject to a front-end sales charge. Society Asset Management, Inc. and Clay Finlay, Inc. each serve as investment adviser to certain series of Society.

7. The Highmark Group ("Highmark") is a registered open-end management investment company organized as a Massachusetts business trust. Highmark offers shares in eight series. Pursuant to the Prior Order, Highmark currently offers two classes of shares in its money market series. Class A shareholders pay a distribution fee pursuant to a rule 12b–1 plan at an annual rate of up to .25% of average annual net assets. Class B shareholders pay no rule 12b–1 fees. Purchases of shares of Highmark are not subject to a sales charge. The Bank of California, N.A. is the investment adviser for each of Highmark's series.

8. Praxis Mutual Funds ("Praxis") is a registered open-end management investment company organized as a Delaware business trust. Praxis plans to offer two series of shares. When their registration statements are declared effective, both series of Praxis will offer one class of shares. Praxis shareholders will pay a distribution and services fee pursuant to rule 12b–1 at an annual rate of up to 1% of the average daily net assets attributable to each series. Certain series of Praxis will be subject to a front-end sales charge. MMA Capital Management will be the investment adviser for each series of Praxis.

9. Winsbury, a broker-dealer registered under the Securities Exchange Act of 1934, is the principal underwriter and administrator for each of the Funds.

10. Under the Prior Order, the Funds are permitted to offer up to four separate classes of shares. Class A shares are offered to individual investors through broker-dealers or directly by Winsbury. Class B shares are offered to qualified accounts through correspondent banks, financial institutions, and other organizations. Class C shares are offered for monies that are held in a fiduciary, agency, custodial or similar capacity by a bank. Class C shares may also be purchased by certain other limited categories of investors, including employees and retired employees of the Advisers and Winsbury, trustees of the Funds, the spouses and children of each of the foregoing, and participants in payroll deduction plans, 401(k) plans or 403(b) plans invested in the Funds. Class D shareholders consist solely of those investors who, as of the day immediately preceding the date on which a Fund implements the multiple class structure, own shares in the Fund but who are not eligible to purchase Class C shares.

11. Under the Prior Order, Funds may offer Class A and Class B shares in connection with plans adopted pursuant to rule 12b–1. Class A and Class B rule 12b–1 plans may provide for the payment of a distribution fee to Winsbury not to exceed an annual rate of .40% and .25%, respectively, of the average daily net assets attributable to a Fund's Class A or Class B shares. Winsbury may reallocate part or all of the fee as compensation to broker-dealers (in the case of Class A) or to correspondent banks, financial institutions, and other organizations (in the case of Class B). Class C and Class D shareholders may not adopt a rule 12b–1 plan.

12. Applicants propose to amend the Prior Order to alter the categories of investors that are eligible to purchase Class C shares. The Funds intend to offer Class C shares through the trust department of any bank for monies that are held in a fiduciary, agency, custodial, or similar capacity. Employees, retired employees, trustees, family members, and plan participants described above will be eligible to purchase Class C shares, but will be eligible to purchase Class A shares without the imposition of a sales load. Class C shareholders will not be charged a sales load nor incur any rule 12b–1 fees.

13. Applicants also propose to amend the Prior Order to permit the Funds to offer a new Class E. Class E shares will be offered for purchase directly from Winsbury and through broker-dealers that have entered into shareholder servicing and/or distribution agreements with Winsbury. The initial shareholders of Class E will adopt a rule 12b–1 plan providing that the Funds will pay a distribution fee to Winsbury at a maximum annual rate of up to .75% of the average daily net assets attributable to Class E shares. The Funds also will pay a servicing fee to Winsbury pursuant to either a rule 12b–1 plan or a non-rule 12b–1 shareholder servicing plan at an annual rate of up to .25% of the average daily net assets attributable to Class E shares.

14. Investors purchasing Class E shares will not be subject to a sales charge at the time of purchase. However, an investor's proceeds from a redemption of Class E shares made within a specified period (not to exceed 4 years) from the time of purchase may be subject to a CDSC. The amount of the CDSC will be calculated as a percentage of the lower of the net asset value of the shares at the time of purchase or redemption. Class E shares will not be subject to a CDSC to the extent that the value of such shares represents capital appreciation or reinvestment of dividends.

15. No CDSC will be imposed on exchanges of Class E shares of any series of a Fund for Class E shares of other series of that Fund. If the shares acquired in the exchange are redeemed within four years following the original investment, however, an appropriate CDSC will be charged. Applicants will comply with rule 11a–3 with respect to all exchanges of shares.

16. Applicants intend to waive the CDSC on redemptions in connection with: (1) The death or disability of a shareholder, as defined in section 72(a)(7) of the Internal Revenue Code (the "Code"), if redemption is made within one year of the death or disability; (b) distributions from retirement plans qualified under Code

section 401(a) when such redemptions are necessary to make distributions to plan participants; and (c) distributions from a custodial account under Code section 403(b)(7) or an individual retirement account due to a shareholder's attainment of age 70½.

17. If a shareholder has not redeemed his or her Class E shares at the end of the eighth year after the date of their acquisition, his or her Class E shares will automatically convert into Class A shares at the relative net asset values of each of the classes. Shares purchased through the reinvestment of dividends and other distributions paid with respect to Class E shares will convert to Class A in direct proportion to the ratio that the shareholder's Class E shares converting to Class A bears to the shareholder's total Class E shares not acquired through dividends and distributions. If a shareholder who owns both Class A shares and Class E shares redeems less than his or her entire investment, then shares will be redeemed in the following order: (a) Any Class E shares that are not subject to a CDSC; (b) Class A shares; and (c) Class E shares subject to a CDSC, unless the shareholder has made a specific election otherwise.

18. The Prior Order authorized classes that will be offered in conjunction with rule 12b–1 plans. The Funds now seek the flexibility to offer some or all of the classes in conjunction with a shareholder service plan in addition to or in lieu of a rule 12b–1 plan. Each shareholder service plan will limit the service fee payable to Winsbury to a maximum annual rate of .25% of the average daily net assets attributable to shares of that class. Each shareholder service plan will be adopted and operated in accordance with the procedures set forth in rule 12b–1 (b)–(f) as if the expenditures made thereunder were subject to rule 12b–1, except that shareholders will not possess the voting rights specified in rule 12b–1.

Applicants' Legal Analysis

1. Applicants request an exemptive order under section 6(c) of the Act to the extent that the proposed issuance and sale of shares representing interests in the same investment portfolio might be deemed: (1) To result in a "senior security" within the meaning of section 18(g) and to be prohibited by section 18(f)(1); or (2) to violate the equal voting provisions of section 18(i).

2. Applicants assert that the proposed allocation of expenses and voting rights in the manner described below is equitable and would not discriminate against any group of shareholders. Investors purchasing shares offered in connection with a rule 12–1 plan would bear the costs associated with services rendered pursuant to the 12b–1 plan and would possess exclusive shareholder voting rights with respect to matters affecting such 12b–1 plan, while investors purchasing shares that are not covered by such 12b–1 plan would not bear such expenses or possess such voting rights.

3. Applicants state that the proposed arrangement does not involve borrowing and will not affect a Fund's existing assets or reserves. Nor will the proposed arrangement increase the speculative character of the shares in a series since all shares will participate in all of the series' income and expenses (except for the 12b–1 fees and expenses assessed to a particular class). Applicants submit that the requested exemption is appropriate, in the public interest, and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

4. Applicants submit that the requested exemption to permit the Funds to implement the proposed Class E CDSC is appropriate in the public interest, consistent with the protection of investors, and consistent with the purposes fairly intended by the policy and provisions of the Act. The proposed CDSC arrangement will provide shareholders the option of having their full payment invested for them at the time of their purchase of shares of the Funds with no deduction of a sales charge.

Applicants' Conditions

Applicants agree that any order granting the requested relief shall be subject to the following conditions:

1. The classes each will represent interests in the same portfolio of investments of a Fund and be identical in all respects except for certain differences related to (a) the method of financing certain expenses ("Class Expenses"), which are limited to: (i) Transfer agent fees as identified by the Fund's transfer agent as being attributable to a specific class; (ii) printing and postage expenses related to preparing and distributing materials such as shareholder reports, prospectuses, and proxies to current shareholders; (iii) Blue Sky registration fees incurred by a class of shares; (iv) SEC registration fees incurred by a class of shares; (v) the expense of administrative personnel and services as required to support the shareholders of a specific class; (vi) litigation or other legal expenses relating solely to one class of shares; and (vii) trustees/directors' fees incurred as a result of issues relating to one class of shares; (b) expenses assessed to a class pursuant to a rule 12b–1 plan; (c) the related voting rights as to matters exclusively affecting one class of shares; (d) exchange privileges; (e) the conversion feature of Class E shares; and (f) class designation differences. Any additional incremental expenses not specifically identified above that are subsequently identified and determined to be properly allocated to one class of shares shall no be so allocated until approved by the SEC pursuant to an amended order.

2. The board of trustees/directors of a Fund, including a majority of the independent trustees or directors, will approve the offering of different classes of shares of the Fund (the "Multi-Class System") prior to the implementation of the Multi-Class System. The minutes of the meetings of the board of trustees/directors of a Fund regarding the deliberations of the trustees or directors with respect to the approvals necessary to implement the Multi-Class System will reflect in detail the reasons for the trustees' or directors' determination that the proposed Multi-Class System is in the best interests of both the Fund and its shareholders.

3. The initial determination of the Class Expenses that will be allocated to a particular class and any subsequent changes thereto will be reviewed and approved by a vote of the board of trustees/directors of a Fund including a majority of the trustees/directors who are not interested persons of such Fund. Any person authorized to direct the allocation and disposition of monies paid or payable by a Fund to meet Class Expenses shall provide to the board of trustees/directors, and the trustees/directors shall review, at least quarterly, a written report of the amounts so expended and the purposes for which such expenditures were made.

4. On an ongoing basis, the trustees or directors of a Fund, pursuant to their fiduciary responsibilities under the Act and otherwise, will monitor the Fund for the existence of any material conflicts among the interests of the various classes of shares. The trustees or directors, including a majority of the independent trustees or directors, shall take such action as is reasonably necessary to eliminate any such conflicts that may develop. The Fund's adviser and distributor will be responsible for reporting any potential or existing conflicts to the trustees or directors. If a conflict arises, the adviser and the distributor, at their own cost, will remedy such conflict up to and including establishing a new registered management investment company.

5. The distributor of a Fund will adopt compliance standards as to when each class of shares may be sold to particular investors. Applicants will require all persons selling shares of the Funds to agree to conform to such standards.

6. The board of trustees/directors of a Fund will receive quarterly and annual statements concerning distribution and shareholder servicing expenditures complying with paragraph (b)(3)(ii) of rule 12b–1, as it may be amended from time to time. In the statements, only expenditures properly attributable to the sale or servicing of a particular class of shares will be used to justify any fee charged to that class. Expenditures not related to the sale or servicing of a particular class will not be presented to the board of trustees/directors to justify any fee attributable to that class. The statements, including the allocations upon which they are based, will be subject to the review and approval of the independent trustees/directors in the exercise of their fiduciary duties.

7. Dividends paid by a Fund with respect to a class of shares in a series, to the extent that dividends are paid, will be calculated in the same manner, at the same time, on the same day, and will be in the same amount as dividends paid by a Fund with respect to each other class of shares in the same series, except that Class Expenses and payments made pursuant to a rule 12b–1 plan or shareholder servicing plan will be allocated exclusively to that class.

8. The methodology and procedures for calculating the net asset value and dividend/distributions of the various classes and the proper allocation of expenses among the classes will be reviewed by an expert (the "Expert") who has rendered a report to applicants, which has been provided to the SEC, that such methodology and procedures are adequate to ensure that such calculations and allocations will be made in an appropriate manner. On an on-going basis, the Expert, or an appropriate substitute Expert, will monitor the manner in which the calculations and allocations are being made and, based upon such review, will render at least annually a report to the Fund that the calculations and allocations are being made properly. The reports of the Expert shall be filed as part of the periodic reports filed with the SEC pursuant to sections 30(a) and 30(b)(1) of the Act. The work papers of the Expert with respect to such reports, following request by a Fund (which each Fund agrees to provide), will be available for inspection by the SEC staff upon the written request to a Fund for such work papers by a senior member of the Division of Investment Management, limited to the Director, an Associate Director, the Chief Financial Analyst, an Assistant Director, and any Regional Administrators or Associate and Assistant Regional Administrators. The initial report of the Expert will be a "Special Purpose" report on the "Design of a System" and ongoing reports will be "reports on policies and procedures placed in operation and tests of operating effectiveness" as defined and described in Statement of Auditing Standards No. 44 (respecting the initial report) and No. 70 (respecting ongoing reports) of the American Institute of Certified Public Accountants ("AICPA"), as it may be amended from time to time, or in similar auditing standards as may be adopted by the AICPA from time to time.

9. Applicants have adequate facilities in place to ensure implementation of the methodology and procedures for calculating the net asset value and dividends/distributions of the various classes of shares and the proper allocation of expenses among the classes of shares. This representation will be concurred with by the Expert in the initial report referred to in Condition 8 above and will be concurred with by the Expert or an appropriate substitute Expert on an ongoing basis at least annually in the on-going reports referred to in that condition. Applicants agree to take immediate corrective action if the Expert, or appropriate substitute Expert, does not so concur in the on-going reports.

10. The prospectus of each class of a Fund will contain a statement to the effect that any person entitled to receive compensation for selling Fund shares may receive different compensation with respect to one particular class of shares over another in the Fund.

11. The conditions pursuant to which an exemptive order requested by the application may be granted and the duties and responsibilities of the board of trustees/directors of a Fund with respect to the Multi-Class System described in the application will be set forth in guidelines which will be furnished to the board of trustees/directors of the Fund.

12. Each Fund will disclose the respective expenses, performance data, distribution arrangements, services, fees, sales loads, and exchange privileges applicable to each class of shares in every prospectus, regardless of whether all classes of shares are offered through each prospectus. Each Fund will disclose the respective expenses and performance data applicable to all classes of shares in every shareholder report. The shareholder reports will contain in the statement of assets and liabilities and statement of operations, information related to the Fund as a whole generally and not on a per class basis. Each Fund's per share data, however, will be prepared on a per class basis with respect to all classes of shares of such Fund. To the extent any advertisement or sales literature describes the expenses or performance data applicable to any class of shares, it will also disclose the respective expenses and/or performance data applicable to all classes of shares. The information provided by applicants for publication in any newspaper or similar listing of a Fund's net asset value and public offering price will present each class of shares separately.

13. Applicants acknowledge that the grant of the exemptive order requested by the application will not imply SEC approval, authorization or acquiescence in any particular level of payments that a Fund may make pursuant to a rule 12b–1 plan or shareholder services plan in reliance on the exemptive order.

14. Class E shares will convert into Class A shares on the basis of the relative net asset values of the two classes, without the imposition of any sales load, fee, or other charge. After conversion, the converted shares will be subject to an asset-based sales charge and/or service fee (as those terms are defined in Article III, Section 26 of the NASD's Rules of Fair Practice), if any, that in the aggregate are lower than the asset-based sales charge and service fee to which they were subject prior to the conversion.

15. If a Fund implements any amendment to its rule 12b–1 plan (or, if presented to shareholders, adopts or implements any amendment of a non-rule 12b–1 shareholder services plan) that would increase materially the amount that may be borne by the Class A shares under the plan, existing Class E shares will stop converting into Class A shares unless the Class E shareholders, voting separately as a class, approve the proposal. The directors/trustees shall take such action as is necessary to ensure that existing Class E shares are exchanged or converted into a new class of shares ("New Class A"), identical in all material respects to the Class A as it existed prior to implementation of the proposal, no later than such shares previously were scheduled to convert into Class A. If deemed advisable by the directors/trustees to implement the foregoing, such action may include the exchange of all existing Class E shares for a new class ("New Class E"), identical to existing Class E in all

material respects except that New Class E will convert into New Class A. New Class A or New Class E may be formed without further exemptive relief. Exchanges or conversions described in this condition shall be effected in any manner that the directors/trustees reasonably believe will not be subject to federal taxation. Any additional cost associated with the creation, exchange, or conversion of New Class A or New Class E shall be borne solely by Winsbury. Class E shares sold after the implementation of the proposal may convert into Class A shares subject to the higher maximum payment, provided that the material features of the Class A plan and the relationship of such plan to Class E are disclosed in an effective registration statement.

16. If any class will be subject to a shareholder service plan, such shareholder service plan will be adopted and operated in accordance with the procedures set forth in rule 12b–1 (b) through (f) as if the expenditures made thereunder were subject to rule 12b–1, except that shareholders will not possess the voting rights specified in rule 12b–1.

17. Applicants will comply with the provisions of proposed rule 6c–10 under the Act, Investment Company Act Release No. 16169 (Nov. 2, 1988), as such rule is currently proposed and as it may be reproposed, adopted, or amended.

For the Commission, by the Division of Investment Management, under delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28482 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

[Rel No. IC–19864; 812–8454]

The First Trust Special Situations Trust, Series 69

November 12, 1993.

AGENCY: Securities and Exchange Commission (the "SEC" or "Commission").

ACTION: Notice of application for exemption under the Investment Company Act of 1940 (the "Act").

APPLICANT: The First Trust Special Situations Trust, Series 69.

RELEVANT ACT SECTIONS: Exemption requested under section 6(c) from the provisions of section 12(d)(3).

SUMMARY OF APPLICATION: Applicant seeks a conditional order on behalf of itself and certain subsequent series to permit each series to invest up to ten percent of its total assets in securities of issuers that derived more than fifteen percent of their gross revenues in their most recent fiscal year from securities related activities.

FILING DATE: The application was filed on June 17, 1993.

HEARING OR NOTIFICATION OF HEARING: Interested persons may request a hearing on the application by writing to the SEC's Secretary and serving applicant with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on December 7, 1993, and should be accompanied by proof of service on applicant in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the SEC's Secretary.

ADDRESSES: Secretary, SEC, 450 Fifth Street, NW., Washington, DC 20549. Applicant, c/o Nike Securities L.P., 1001 Warrenville Road, Lisle, Illinois 60532, Attn.: Robert Bredemeier.

FOR FURTHER INFORMATION CONTACT: Felicia H. Kung, Senior Attorney, at (202) 504–2803, or Elizabeth G. Osterman, Branch Chief, at (202) 272–3016 (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee from the SEC's Public Reference Branch.

Applicant's Representations

1. Applicant and certain subsequent series (each a "Series"), will be a series of The First Trust Special Situations Trust, a unit investment trust registered under the Act. Nike Securities L.P., is the depositor for applicant (the "Sponsor").

2. Each Series' investment objective is to provide total return through a combination of potential capital appreciation and current dividend income. Each Series will invest approximately ten percent, but in no event more than 10.5 percent,[1] of the value of its total assets in each of the ten common stocks in the Dow Jones Industrial Average ("DJIA") with the highest dividend yields as of its initial date of deposit, and hold those stocks for approximately one year.

3. The DJIA comprises 30 widely-held common stocks listed on the New York Stock Exchange which are chosen by the editors of The Wall Street Journal. The DJIA is the property of Dow Jones & Company, Inc., which is not affiliated with any Series or the Sponsor and does not participate in any way in the creation of any Series or the selection of its stocks.

4. The securities deposited in each Series will be chosen solely according to the formula described above, and will not necessarily reflect the research opinions or buy or sell recommendations of the Sponsor. The Sponsor is authorized to determine the date of deposit, to purchase securities for deposit in the Series, and to supervise each Series' portfolio. The Sponsor does not have any discretion as to which securities are purchased. Securities deposited in a Series may include securities of issuers that derived more than fifteen percent of their gross revenues in their most recent fiscal year from securities related activities.

5. During the 90-day period following the initial date of deposit, the Sponsor may deposit additional securities while maintaining to the extent practicable the original proportionate relationship among the number of shares of each stock in the portfolio. Deposits made after this 90-day period must replicate exactly (subject to certain limited exceptions) the proportionate relationship among the face amounts of the securities comprising the portfolio at the end of the initial 90-day period, whether or not a stock continues to be among the ten highest dividend yielding stocks.

6. The Series' portfolios will not be actively managed. Sales of portfolio securities will be made in connection with redemptions of units issued by a Series and at termination of the Series on a date specified a year in advance. The Sponsor does not have discretion as to when securities will be sold except that the Sponsor is authorized to sell securities in extremely limited circumstances (such as in connection with a public tender, merger, or acquisition affecting the security). The adverse financial condition of an issuer will not necessarily require the sale of its securities from a Series' portfolio.

Applicant's Legal Analysis

1. Section 121(d)(3), with limited exceptions, prohibits an investment company from acquiring any security issued by any person who is a broker,

[1] The Sponsor will attempt to purchase equal values of each of the ten common stocks in a Series' portfolio. However, it is more efficient if securities are purchased in 100 share lots and 50 share lots. As a result, applicant and each Series may purchase securities of a securities related issuer which represent over ten percent, but in no event more than 10.5 percent, of a Series' assets on the initial date of deposit to the extent necessary to enable the Sponsor to meet its purchase requirements and to obtain the best price for the securities.

dealer, underwriter, or investment adviser. Rule 12d3–1(b) exempts the purchase of securities of an issuer that derived more than fifteen percent of its gross revenues in its most recent fiscal year from securities related activities, provided that, among other things, immediately after such acquisition, the acquiring company has invested not more than five percent of the value of its total assets in securities of the issuer. Notwithstanding the above, rule 12d3–1 prohibits any registered investment company from acquiring any security issued by that company's investment adviser, promoter, or principal underwriter or any affiliated person of such investment adviser, promoter, or principal underwriter that is a securities related business, with certain limited exceptions.

2. Applicant seeks an exemption from the provisions of section 12(d)(3) to permit any Series to invest up to approximately ten percent, but in no event more than 10.5 percent, of the value of its total assets in securities of an issuer that derives more than fifteen percent of its gross revenues from securities related activities. Applicant and each Series will comply with all of the provisions of rule 12d3–1, except for the five percent limitation on the amount of assets that may be invested in securities of issuers that derived more than fifteen percent of their gross revenues from securities related activities in their most recent fiscal year.

3. Applicants assert that section 12(d)(3) was intended to prevent investment companies from exposing their assets to the entrepreneurial risks of securities related businesses, to prevent potential conflicts of interest, and to eliminate certain reciprocal practices between investment companies and securities related businesses.

4. One potential conflict discussed by applicant could occur if an investment company purchases securities or other interests in a broker-dealer to reward that broker-dealer for selling fund shares, rather than solely on investment merit. Applicant argues that this concern does not arise in connection with its application because neither the applicant nor any Sponsor has discretion in choosing the securities or amount purchased. The security must first be included in the DJIA, which is unaffiliated with the Sponsors and the applicant, and must also qualify as one of the ten highest dividend yielding securities as calculated by the objective formula described above.

5. Applicant also states that the effect of a Series' purchase on the stock of parents of broker-dealers would be *de minimis*. Applicant asserts that the common stocks of securities related issuers represented in the DJIA are widely held, have active markets, and that potential purchases by any Series would represent an insignificant amount of the outstanding common stock and the trading volume of any of these issues. According to applicant, it is highly unlikely that purchases of these securities by a Series would have any significant impact on the market value of any such securities.

6. Another potential conflict of interest discussed by applicant could occur if an investment company directed brokerage to a broker-dealer in which the company has invested to enhance the broker-dealer's profitability or to assist it during financial difficulty, even though that broker-dealer may not offer the best price and execution. To preclude this type of conflict, applicant and each Series agree, as a condition of this application, that no company held in the Series' portfolio nor any affiliate thereof will act as broker for any Series in the purchase or sale of any security for its portfolio.

7. Applicant states that the requested relief is appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

Condition

Applicant agrees that the requested exemptive order may be conditioned upon no company held in the Series' portfolio, nor any affiliate thereof, acting as broker for any Series in the purchase or sale of any security for the Series' portfolio.

For the Commission, by the Division of Investment Management, under delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28483 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

[Rel. No. IC–19863; 812–8434]

Great Hall Value Trust—Series 1

November 12, 1993.

AGENCY: Securities and Exchange Commission (the "SEC" or "Commission").

ACTION: Notice of application for exemption under the Investment Company Act of 1940 (the "Act").

APPLICANT: Great Hall Value Trust—Series 1.

RELEVANT ACT SECTIONS: Exemption requested under section 6(c) from the provisions of section 12(d)(3).

SUMMARY OF APPLICATION: Applicant seeks a conditional order on behalf of itself and certain subsequent series to permit each series to invest up to ten percent of its total assets in securities of issuers that derived more than fifteen percent of their gross revenues in their most recent fiscal year from securities related activities.

FILING DATE: The application was filed on June 14, 1993.

HEARING OR NOTIFICATION OF HEARING: Interested persons may request a hearing on the application by writing to the SEC's Secretary and serving applicant with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on December 7, 1993, and should be accompanied by proof of service on applicant in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the SEC's Secretary.

ADDRESSES: Secretary, SEC, 450 Fifth Street, NW., Washington, DC 20549. Applicant, c/o Insight Investment Management, Inc., 60 South Sixth Street, Minneapolis, Minnesota 55402–4422. Attn: Lee Erickson.

FOR FURTHER INFORMATION CONTACT: Felicia H. Kung, Senior Attorney, at (202) 504–2803, or Elizabeth G. Osterman, Branch Chief, at (202) 272–3016 (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee from the SEC's Public Reference Branch.

Applicant's Representations

1. Applicant and certain subsequent series (each a "Series") will be a series of Great Hall Value Trust, a unit investment trust registered under the Act. Insight Investment Management, Inc. is the depositor for applicant (the "Sponsor").

2. Each Series' investment objective is to provide total return through a combination of potential capital appreciation and current dividend income. Each Series will invest approximately ten percent, but in no event more than 10.5 percent,[1] of the

[1] The Sponsor will attempt to purchase equal values of each of the ten common stocks in a Series'

value of its total assets in each of the ten common stocks in the Dow Jones Industrial Average ("DJIA") with the highest dividend yields as of its initial date of deposit, and hold those stocks for approximately one year.

3. The DJIA comprises 30 widely-held common stocks listed on the New York Stock Exchange which are chosen by the editors of The Wall Street Journal. The DJIA is the property of Dow Jones & Company, Inc., which is not affiliated with any Series or the Sponsor and does not participate in any way in the creation of any Series or the selection of its stocks.

4. The securities deposited in each Series will be chosen solely according to the formula described above, and will not necessarily reflect the research opinions or buy or sell recommendations of the Sponsor. The Sponsor is authorized to determine the date of deposit, to purchase securities for deposit in the Series, and to supervise each Series' portfolio. The Sponsor does not have any discretion as to which securities are purchased. Securities deposited in a Series may include securities of issuers that derived more than fifteen percent of their gross revenues in their most recent fiscal year from securities related activities.

5. During the 90-day period following the initial date of deposit, the Sponsor may deposit additional securities while maintaining to the extent practicable the original proportionate relationship among the number of shares of each stock in the portfolio. Deposits made after this 90-day period must replicate exactly (subject to certain limited exceptions) the proportionate relationship among the face amounts of the securities comprising the portfolio at the end of the initial 90-day period, whether or not a stock continues to be among the ten highest dividend yielding stocks.

6. The Series' portfolios will not be actively managed. Sales of portfolio securities will be made in connection with redemptions of units issued by a Series and at termination of the Series on a date specified a year in advance. The Sponsor does not have discretion as to when securities will be sold except that the Sponsor is authorized to sell securities in extremely limited circumstances (such as in connection with a public tender, merger, or acquisition affecting the security). The adverse financial condition of an issuer will not necessarily require the sale of its securities from a Series' portfolio.

portfolio. However, it is more efficient if securities are purchased in 100 share lots and 50 share lots. As a result, applicant and each Series may purchase securities of a securities related issuer which represent over ten percent, but in no event more than 10.5 percent, of a Series' assets on the initial date of deposit to the extent necessary to enable the Sponsor to meet its purchase requirements and to obtain the best price for the securities.

Applicant's Legal Analysis

1. Section 12(d)(3), with limited exceptions, prohibits an investment company from acquiring any security issued by any person who is a broker, dealer, underwriter, or investment adviser. Rule 12d3–1(b) exempts the purchase of securities of an issuer that derived more than fifteen percent of its gross revenues in its most recent fiscal year from securities related activities, provided that, among other things, immediately after such acquisition, the acquiring company has invested not more than five percent of the value of its total assets in securities of the issuer. Notwithstanding the above, rule 12d3–1 prohibits any registered investment company from acquiring any security issued by that company's investment adviser, promoter, or principal underwriter or any affiliated person of such investment adviser, promoter, or principal underwriter that is a securities related business, with certain limited exceptions.

2. Applicant seeks an exemption from the provisions of section 12(d)(3) to permit any Series to invest up to approximately ten percent, but in no event more than 10.5 percent, of the value of its total assets in securities of an issuer that derives more than fifteen percent of its gross revenues from securities related activities. Applicant and each Series will comply with all of the provisions of rule 12d3–1, except for the five percent limitation on the amount of assets that may be invested in securities of issuers that derived more than fifteen percent of their gross revenues from securities related activities in their most recent fiscal year.

3. Applicants assert that section 12(d)(3) was intended to prevent investment companies from exposing their assets to the entrepreneurial risks of securities related businesses, to prevent potential conflicts of interest, and to eliminate certain reciprocal practices between investment companies and securities related businesses.

4. One potential conflict discussed by applicant could occur if an investment company purchases securities or other interests in a broker-dealer to reward that broker-dealer for selling fund shares, rather than solely on investment merit. Applicant argues that this concern does not arise in connection with its application because neither the applicant nor any Sponsor has discretion in choosing the securities or amount purchased. The security must first be included in the DJIA, which is unaffiliated with the Sponsors and the applicant, and must also qualify as one of the ten highest dividend yielding securities as calculated by the objective formula described above.

5. Applicant also states that the effect of a Series' purchase on the stock of parents of broker-dealers would be *de minimis*. Applciant asserts that the common stocks of securities related issuers represented in the DJIA are widely held, have active markets, and that potential purchases by any Series would represent an insignificant amount of the outstanding common stock and the trading volume of any of these issues. According to applicant, it is highly unlikely that purchases of these securities by a Series would have any significant impact on the market value of any such securities.

6. Another potential conflict of interest discussed by applicant could occur if an investment company directed brokerage to a broker-dealer in which the company has invested to enhance the broker-dealer's profitability or to assist it during financial difficulty, even though that broker-dealer may not offer the best price and execution. To preclude this type of conflict, applicant and each Series agree, as a condition of this application, that no company held in the Series' portfolio nor any affiliate thereof will act as a broker for any Series in the purchase or sale or any security for its portfolio.

7. Applicant states that the requested relief is appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

Condition

Applicant agrees that the requested exemptive order may be conditioned upon no company held in the Series' portfolio, nor any affiliate thereof, acting as broker for any Series in the purchase or sale of any security for the Series' portfolio.

For the Commission, by the Division of Investment Management, under delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28484 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

[Rel. No. IC–19862; 812–8378]

Pasadena Investment Trust, et al.; Application

November 12, 1993.

AGENCY: Securities and Exchange Commission (the "SEC").

ACTION: Notice of application for exemption under the Investment Company Act of 1940 (the "Act").

APPLICANTS: Pasadena Investment Trust (the "Trust"); Roger Engemann Management Co., Inc. (the "Adviser"); and Pasadena Funds Services (the "Distributor").

RELEVANT ACT SECTIONS: Exemption requested under section 6(c) from the provisions of sections 2(a) (32), 2(a) (35), 18(f), 18(g), 18(i), 22(c) and 22(d) of the Act and rule 22c–1 thereunder.

SUMMARY OF APPLICATION: Applicants seek an order permitting them to issue multiple classes of shares representing interests in the same portfolio of securities, assess a contingent deferred sales charge ("CDSC") on certain redemptions of shares, and waive the CDSC in certain instances.

FILING DATES: The application was filed on April 30, 1993, and amended on July 29, 1993, October 6, 1993, and October 25, 1993.

HEARING OR NOTIFICATION OF HEARING: An order granting the application will be issued unless the SEC orders a hearing. Interested persons may request a hearing by writing to the SEC's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on December 8, 1993, and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the SEC's Secretary.

ADDRESSES: Secretary, SEC, 450 Fifth Street, NW., Washington, DC 20549. Applicants, 600 North Rosemead Boulevard, Pasadena, California 91107–2102.

FOR FURTHER INFORMATION CONTACT: Marc Duffy, Staff Attorney, (202) 272–2511, or C. David Messman, Branch Chief, (202) 272–3018 (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application is available for a fee at the SEC's Public Reference Branch.

Applicants' Representations

1. The Trust is an open-end management investment company registered under the Act and consisting of the following four series: Pasadena Growth Fund, Pasadena Nifty Fifty Fund, Pasadena Balanced Return Fund, and Pasadena Global Growth Fund (the "Portfolios"). The Adviser serves as the investment adviser to each Portfolio. The Distributor acts as the distributor and principal underwriter of shares of the Portfolios.

2. Applicants also request relief to permit any open-end management investment company that now or in the future is in the same "group of investment companies" with the Trust, as defined in rule 11a–3 under the Act, to issue multiple classes of shares in accordance with the application.

3. Currently, the Portfolios offer their shares to the public at net asset value plus a front-end sales charge. The Portfolios do not have a plan of distribution in effect pursuant to rule 12b–1 under the Act (a "12b–1 Plan"). Pursuant to service agreements ("Service Agreements"), the Portfolios pay a continuing service fee ("Service Fee") to service providers, including the Adviser, for providing certain ongoing services to clients owning shares of the Portfolios. None of the Portfolios currently imposes a CDSC.

4. Applicants propose to offer a multiple distribution plan (the Multi-Class Plan"). Applicants will implement the Multi-Class Plan by designating three classes of shares in a Portfolio. Each Portfolio may offer some or all of the three classes. In addition, other classes of shares may be offered from time to time, each in connection with one or more 12b–1 Plans or Service Agreements, which may differ from the 12b–1 Plans, Service Agreements and payments described in the application, or with no distribution plans or service agreements or distribution or service fees at all. Any such classes will comply with all of the conditions contained in the application.

5. The existing class of shares of each Portfolio will be Class A shares. Class A shares will continue to be sold at net asset value plus a front-end sales charge of up to 5.50%. The sales charge will continue to be subject to reductions for larger purchases, under a quantity discount, under a right of accumulation, or under a letter of intent. The sales load will be subject to certain other reductions permitted by section 22(d) of the Act and set forth in the registration statement of the Trust. Pursuant to Services Agreements, payments of Service Fees will continue to be made with respect to Class A Shares in an amount equal to 0.25% of the average daily net asset value of a Portfolio's shares.

6. Class B Shares will be offered to investors at net asset value. Each Portfolio will pay to the Distributor a rule 12b–1 distribution fee calculated at an annual rate of up to 0.75% of the average daily net asset value of its Class B shares. Each Portfolio also will pay a continuing Service Fee to service providers pursuant to the existing Services Agreements in an amount equal to 0.25% of the average daily net asset value of the Class B shares held by clients of the service provider. Class B shares also will be subject to a conversion feature as described below. In addition, an investor's proceeds from a redemption of Class B shares made within a specified period after purchase generally will be subject to a CDSC as described below.

7. Class C shares will be sold at net asset value with no front-end sales charge or CDSC. Class C shares will be subject to a rule 12b–1 distribution fee of up to 0.75% of the average daily net asset value of the Class C shares. Pursuant to a Service Agreement, Class C shares also will be subject to a continuing Service Fee of 0.25% of the average daily net asset value of a Portfolio's Class C shares.

8. The Portfolio's will have a conversion feature whereby Class B shares of a Portfolio, other than those purchased through the reinvestment of dividends and distributions, automatically will convert to Class A shares of that Portfolio at net asset value on the first business day of the month following the specified anniversary of the purchase of the Class B Shares. Shares purchased through the reinvestment of dividends and other distributions paid in respect of Class B shares also will be Class B shares. For purposes of conversion to Class A shares, however, all Class B shares in a shareholder's account that were purchased through the reinvestment of dividends and other distributions paid in respect of Class B shares will be considered to be held in a separate sub-account. Each time Class B shares in the shareholder's account (other than Class B shares in the sub-account referred to in the preceding sentence) convert to Class A shares, a pro rata portion of the Class B shares in the sub-account also will convert to Class A shares. Such portion will be determined by the ratio that the shareholder's Class B shares converting to Class A shares bears to the shareholder's total Class B shares not

acquired through dividends and distributions. No class of shares (including any future classes), other than Class B shares, will have a conversion feature.

9. The conversion of Class B shared to Class A shares is subject to the continuing availability of a ruling of the Internal Revenue Service or an opinion of counsel that payment of different dividends on Class A and Class B shares by a Portfolio does not result in the Portfolio's dividends or distributions constituting "preferential dividends" under the Internal Revenue Code of 1986, as amended (the "Code"), and that such conversion does not constitute a taxable event under the Code. The conversion of Class B shares to Class A shares may be suspended if such a ruling or opinion or counsel is no longer available. In the event that conversions of Class B shares do not occur, Class B shares will continue to be subject to the distribution fee applicable to Class B shares and any incrementally higher class expenses applicable to Class B shares for an indefinite period.

10. Applicants will comply with the recent amendments to Article III, Section 26, of the Rules of Fair Practice of the National Association of Securities Dealers, Inc. (the "NASD's Rules of Fair Practice") regarding asset-based sales charges and service fees. See Securities Exchange Act Release No. 30897 (July 7, 1992).

11. Under the proposed Multi-Class Plan, each share of a particular Portfolio, regardless of class, will represent an equal pro rata interest in the Portfolio and will have identical voting, dividend, liquidation and other rights, except for (i) the amount and type of fees permitted by different 12b–1 Plan provisions and any Service Agreements adopted in the future, or any amendments to existing Service Agreements, that impose different levels of Service Fees among classes; (ii) voting rights on matters pertaining to 12b–1 Plans; (iii) the effect of any incremental expenses which the Board of Trustees ("Trustees"), including a majority of the Trustees who are not "interested persons" of the Trust, as defined in section 2(a)(19) of the Act (the "Independent Trustees"), determine should be allocated or charged on a class basis, which expenses are limited to any litigation expenses and any tax liens relating solely to the class (together with the fees payable pursuant to the class-specific 12b–1 Plans) and any disproportionate fees payable pursuant to the class-specific Service Agreements ("Class Expenses"); (iv) exchange privileges; and (v) the designation of such classes.

12. Each class of shares of a Portfolio will bear *pro rata* with every other class of shares of such Portfolio all Portfolio expenses other than class expenses (which other expenses will be comprised of the fees of the Portfolio's investment adviser and administrator). The Adviser may choose to reimburse or waive Class Expenses on certain classes on a voluntary, temporary basis. The amount of Class Expenses waived or reimbursed by the Adviser may vary from class to class. Class Expenses are by their nature specific to a given class and obviously expected to vary from one class to another. Applicants thus believe that it is acceptable and consistent with shareholder expectations to reimburse or waive Class Expenses at different levels for different classes of the same Portfolio.

13. In addition, the Adviser may waive or reimburse Trust expenses and/or Portfolio Expenses (with or without a waiver or reimbursement of Class Expenses) but only if the same proportionate amount of Trust Expenses and/or Portfolio Expenses are waived or reimbursed for each class. Thus, any Trust Expenses that are waived or reimbursed would be credited to each class of each Portfolio based on the relative net assets of the classes. Similarly, any Portfolio Expenses that are waived or reimbursed would be credited to each class of that portfolio according to the relative net assets of the classes. Trust Expenses and Portfolio Expenses apply equally to all classes of a given Portfolio. Accordingly, it may not be appropriate to waive or reimburse Trust Expenses or Portfolio Expenses at different levels for different classes of the same Portfolio.

14. Applicants also are requesting an exemption from sections 2(a)(32), 2(a)(35), 22(c) and 22(d) of the Act and rule 22c–1 thereunder, to permit the Portfolios to assess a CDSC on certain redemptions of Class B shares of the Portfolios, and to waive the CDSC with respect to certain types of redemptions. In no event will the aggregate amount of the CDSC exceed 5.00% of the aggregate purchase payments made by an investor for Class B shares of a Portfolio.

15. The CDSC will not be imposed on any redemption of Class B shares that were purchased more than four years prior to such redemption (the "CDSC Period"), or on any redemption of Class B shares derived from reinvestment of distributions. Furthermore, no CDSC will be imposed on an amount which represents an increase in the value of the shareholder's account resulting from capital appreciation above the amount paid for the Class B shares purchased during the CDSC Period. As a result, the amount of the CDSC will be calculated as the lesser of the amount that represents a specified percentage of the net asset value of the Class B shares at the time of purchase, or the amount that represents such percentage of the net asset value of the Class B shares at the time of redemption. In determining the applicability and rate of the CDSC, it will be assumed that a redemption is made first of Class B shares representing capital appreciation, next to Class B shares representing reinvestment of dividends and capital gain distributions, and finally of other Class B shares held by the shareholder for the longest period of time. This will result in a CDSC, if any, being imposed at the lowest possible rate.

16. Applicants are requesting the ability to waive or reduce the CDSC in some or all of the following circumstances: (a) following the death or disability of a shareholder, as defined in Section 72(m)(7) of the Code, if redemption is made within one year of death or disability; (b) in connection with a minimum required distribution from an Individual Retirement Account, or other qualified retirement plan to a shareholder who has attained the age of 70 and one-half; (c) in connection with redemptions made pursuant to a shareholder's participation in any systematic withdrawal plan adopted by a Portfolio; and (d) in connection with redemptions by tax-exempt employee benefit plans resulting from the enactment of any law or the promulgation by the Internal Revenue Service or the Department of Labor of any regulation pursuant to which continuation of the investment in such shares would be improper.

17. In addition, the Distributor may provide a pro rata refund out of its own assets of any CDSC paid in connection with a redemption of Class B shares of a Portfolio followed by a reinvestment in such shares effected within 365 days, or a shorter specified period, or such redemption. Upon any such reinvestment, the amount reinvested will be subject to the same CDSC to which such amount was subject prior to the redemption, and the CDSC Period with respect to such amount will continue to run from the original investment date but will be extended by the number of days between the redemption and reinvestment dates.

18. If the Trustees determine that a Portfolio that has been waiving or reducing its CDSC pursuant to any of the items set forth above should not continue to waive or reduce such CDSC, the disclosure in that Portfolio's prospectus will be appropriately revised. Also, any Class B shares

purchased prior to the termination of such waiver or reduction will be able to have the CDSC waived or reduced as provided in the Portfolio's prospectus effective at the time of the purchase of such shares.

Applicants' Legal Analysis

1. Applicants seek an exemption from sections 18(f), 18(g), and 18(i) of the Act to the extent the Multi-Class Plan may result in a senior security, the issuance and sale of which will be prohibited by section 18(f)(1) of the Act, and to the extent the allocation of voting rights under the Multi-Class Play may violate the equal voting provisions of section 18(i).

2. Applicants believe that the proposed Multi-Class Plan does not raise any of the legislative concerns that section 18 of the Act is designed to ameliorate. The proposal does not involve borrowings and does not affect the Portfolios' existing assets or reserves. In addition, the proposed arrangement will not increase the speculative character of the shares of the Portfolios because all such shares will participate pro rata in all of a Portfolio's income and expenses with the exception of the class expenses incurred by each class.

3. Applicants believe that the Multi-Class Plan will both facilitate the distribution of shares by a Portfolio and provide investors with a broader choice as to the method of purchasing shares. Applicants also believe that the proposed Multi-Class Plan will benefit the Portfolios' beneficial owners, irrespective of class, because the proposed arrangement will permit the Trust to save the organizational and other continuing costs that will be incurred if the Trust was required to establish a separate Portfolio for each class of shares, and therefore the larger pool of assets in each Portfolio will better enable the Portfolio's investment manager to achieve the investment objectives of that Portfolio, including diversification.

4. Applicants believe that the proposed imposition of the CDSC on the Class B shares of the Portfolios is fair and in the best interests of the Portfolios' shareholders. By electing to purchase their shares subject to a CDSC, shareholders have the advantage of greater investment dollars working for them from the time of their purchase than if a sales load were imposed at the time of purchase. Furthermore, the CDSC is fair to such shareholders because it applies only to amounts representing purchase payments and does not apply to amounts representing increases in the value of an investor's account through capital appreciation, or to amounts representing reinvestment of distributions.

Applicants' Conditions

Applicants agree that the following conditions may be imposed in any order of the SEC granting the requested relief:

1. Each class of shares will represent interests in the same portfolio of investments of a Portfolio and will be identical in all respects, except as set forth below. The only differences among classes of shares of the same Portfolio will relate to: (i) The existence of 12b-1 Plans and Service Agreements and the impact of the disproportionate payments made under the applicable 12b-1 Plans, and the impact of any disproportionate Service Fees payable pursuant to the class-specific Service Agreements, any incremental expenses which the Trustees, including a majority of the Independent Trustees, determine should be allocated or charged on a class basis, which expenses are limited to any litigation or charged on a class basis, which expenses are limited to any litigation expenses and any tax liens relating solely to the class (together with fees payable pursuant to the class-specific 12b-1 Plans and any disproportionate Service Fees payable pursuant to the class-specific Service Agreements, ("Class Expenses"); and any other incremental expenses subsequently identified that should be properly allocated or charged to one class which shall be approved by the SEC pursuant to any amended order, (ii) voting rights on matters that pertain to 12b-1 Plans, (iii) exchange privileges, (iv) the designation of each class of shares of a Portfolio, and (v) the conversion feature applicable to Class B shares only.

2. The Trustees, including a majority of the Independent Trustees, have approved the offering of different classes of shares, the assessment of the CDSC, and the adoption of the 12b-1 Plans and Services Agreements covering the Class B and Class C shares (the "Multi-Class System"). The minutes of the meetings of the Trustees regarding the deliberations of the Trustees with respect to the approvals necessary to implement the Multi-Class System will reflect in detail the reasons for the Trustees' determination that the proposed Multi-Class System is in the best interests of the Portfolios and their shareholders.

3. The initial determination of the Class Expenses that will be allocated to a particular class has been reviewed and approved by a vote of the Trustees, including a majority of the Independent Trustees, and any subsequent changes to such allocation also will be reviewed and approved in the same manner. Any person authorized to direct the allocation and disposition of monies paid or payable by any Portfolio to meet Class Expenses shall provide to the Trustees, and the Trustees shall review, at least quarterly, a written report of the amounts of such expenses and the purposes for which such expenditures were made.

4. On an ongoing basis the Trustees, pursuant to their fiduciary responsibilities under the Act and otherwise, will monitor each Portfolio for the existence of any material conflicts among the interests of the various classes of shares. The Trustees, including a majority of the Independent Trustees, will take such action as is reasonably necessary to eliminate any such conflicts that may develop. The Adviser and the Distributor will be responsible for reporting any potential or existing conflicts to the Trustees. If a conflict arises, the Adviser and/or the Distributor at their own cost will take such steps as are necessary to remedy such conflict up to and including establishing a new registered management investment company.

5. The Trustees will receive quarterly and annual statements concerning the distribution and shareholder servicing expenditures. In such statements, only expenditures properly attributable to the sale or servicing of a particular class of shares will be used to justify any distribution or servicing fee charged to that class. Expenditures not related to the sale or servicing of a particular class of shares will not be presented to the Trustees to justify any fee attributable to that class. Such statements, including the allocations upon which they are based, will be subject to the review and approval of the Independent Trustees in the exercise of their fiduciary duties.

6. Dividends paid by each Portfolio with respect to a class of shares of a Portfolio will be calculated in the same manner, at the same time, on the same day, and will be in the same amount as dividends paid by the Portfolio with respect to each other class of shares in the same Portfolio, except that each particular class will bear exclusively its own Class Expenses (which shall consist exclusively of any class-specific litigation expenses, any class-specific tax liens, class-specific fees payable pursuant to the class-specific 12b-1 Plan, and any disproportionate Service Fees payable pursuant to the class-specific Service Agreements).

7. The methodology and procedures for calculating the net asset value, dividends and distributions of the various classes and the proper

allocation of expenses among the classes has been reviewed by an expert (the "Expert") who has rendered a report to the applicants, which report has been provided to the staff of the SEC, that such methodology and procedures are adequate to ensure that such calculations and allocations will be made in an appropriate manner. On an ongoing basis, the Expert, or an appropriate substitute Expert, will monitor the manner in which the calculations and allocations are being made and, based upon such review, will render, at least annually, a report to the Portfolios that the calculations and allocations are being made properly. The reports of the Expert will be filed as part of the periodic reports filed with the SEC pursuant to sections 30(a) and 30(b)(1) of the Act and the work papers of the Expert with respect to such reports, following request by the Trust, which the Trust agrees to provide, will be available for inspection by the staff of the SEC upon written request by a senior member of the SEC's Division of Investment Management limited to the Director, an Associate Director, the Chief Accountant, the Chief Financial Analyst, an Assistant Director, and any Regional Administrator or Associate or Assistant Administrator. The initial report of the Expert is a "report on policies and procedures placed in operation" and the ongoing reports will be "reports on policies and procedures placed in operation and tests of operating effectiveness" as defined and described in Statement of Auditing Standards No. 70 of the American Institute of Certified Public Accountants ("AICPA"), as it may be amended from time to time, or in similar auditing standards as may be adopted by the AICPA from time to time.

8. Applicants have adequate facilities in place to ensure implementation of the methodology and procedures for calculating the net asset value and dividends and distributions of the various classes of shares and the proper allocation of expenses among the classes of shares, and this representation has been concurred with by the Expert in the initial report referred to in condition 7 above and will be concurred with by the Expert, or an appropriate substitute Expert, on an ongoing basis at least annually in the ongoing reports referred to in that condition. Applicants will take immediate corrective action if the Expert, or appropriate substitute Expert, does not so concur in the ongoing reports.

9. Each prospectus pursuant to which one or more classes of shares of a Portfolio are offered will include a statement to the effect that a salesperson or any other person entitled to receive compensation for selling or servicing shares may receive different compensation with respect to one particular class of shares over another class in the same Portfolio.

10. The conditions pursuant to which the exemptive order is granted and the duties and responsibilities of the Trustees with respect to the Multi-Class System will be set forth in guidelines to be furnished to the Trustees.

11. The Trust will disclose the respective expenses, performance data, distribution arrangements, services, fees, front-end sales loads, deferred sales loads, and exchange privileges applicable to each class of a Portfolio in every prospectus for shares of such Portfolio, regardless of whether all classes of such Portfolio are offered through such prospectus. The shareholder reports will contain, in the statement of assets and liabilities and statement of operations, information related to a Portfolio as a whole generally and not on a per class basis. Each Portfolio's per share data, however, will be prepared on a per class basis with respect to all classes of shares of such Protfolio. The Trust will disclose the respective expenses and performance data applicable to all classes of each Portfolio in every shareholder report of such Portfolio. To the extent that any advertisement or sales literature describes the expenses or performance data applicable to any class of a Portfolio, it also will disclose the respective expenses and/or performance data applicable to all classes of such Portfolio. The information provided by applicants for publication in any newspaper or similar listing of a Portfolio's net asset value or public offering price will separately present this information for each class of shares of such Portfolio.

12. Applicants will comply with proposed rule 6c–10 under the Act, as such rule is currently proposed, and as it may be reproposed, adopted, or amended.

13. Applicant acknowledge that the grant of the requested exemptive order does not imply SEC approval, authorization of, or acquiescence in any particular level of payments that applicants may make pursuant to the Portfolios' 12b–1 Plans or Service Agreements in reliance on this exemptive order.

14. The Distributor will adopt compliance standards as to when each class of shares may appropriately be sold to particular investors. Applicants will require all persons selling shares of a Portfolio to agree to conform to such standards.

15. Class B shares of each Portfolio will convert into Class A shares of such Portfolio on the basis of the relative net asset values of the two classes, without the imposition of any sales load, fee, or other charge. After conversion, the converted shares will be subject to an asset-based sales charge and/or service fee (as those terms are defined in the NASD's Rules of Fair Practice), if any, that in the aggregate are lower than the combined asset-based sales charge and service fee, if any, to which such shares were subject prior to their conversion.

16. If a Portfolio adopts and implements a 12b–1 Plan for its Class A shares (or, if presented to shareholders, implements any amendment to a 12b–1 Plan previously adopted, or any amendment to its Services Agreement, that will increase materially the amount that may be borne by the Class A shares under such 12b–1 Plan or Services Agreement), existing Class B shares of that Portfolio will stop converting into such Class A shares unless the Class B shareholders, voting separately as a class, approve the proposal. The Trustees shall take such action as is necessary to ensure that existing Class B shares are exchanged or converted into a new class of shares ("New Class A"), identical in all material respects to Class A as it existed prior to implementation of such proposal, no later than the date such Class B shares previously were scheduled to convert into Class A shares. If deemed advisable by the Trustees to implement the foregoing, such action may include the exchange of all existing Class B shares for a new class of shares ("New Class B"), identical to existing Class B shares in all material respects except that New Class B shares will convert into New Class A shares. New Class A or New Class B may be established and issued without further exemptive relief. The exchanges or conversions described in this condition shall be effected in a manner that the Trustees reasonably believe will not be subject to federal taxation. In accordance with condition 4 above, any additional cost associated with the establishment, exchange or conversion of New Class A shares or New Class B shares shall be borne solely by the Adviser and the Distributor. Class B shares sold after the implementation of any such proposal may convert into Class A shares subject to the higher maximum fees, provided that the material features of the Class A fee arrangements and the relationship of such fee arrangements are disclosed in an effective registration statement.

For the SEC, by the Division of Investment Management, under delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28452 Filed 11–18–93; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 35–25820]

Filings Under the Public Utility Holding Company Act of 1935 ("Act")

November 12, 1993.

Notice is hereby given that the following filing(s) has/have been made with the Commission pursuant to provisions of the Act and rules promulgated thereunder. All interested persons are referred to the application(s) and/or declaration(s) for complete statements of the proposed transaction(s) summarized below. The application(s) and/or declaration(s) and any amendments thereto is/are available for public inspection through the Commission's Office of Public Reference.

Interested persons wishing to comment or request a hearing on the application(s) and/or declaration(s) should submit their views in writing by December 6, 1993, to the Secretary, Securities and Exchange Commission, Washington, DC 20549, and serve a copy on the relevant applicant(s) and/or declarant(s) at the address(es) specified below. Proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. Any request for hearing shall identify specifically the issues of fact or law that are disputed. A person who so requests will be notified of any hearing, if ordered, and will receive a copy of any notice or order issued in the matter. After said date, the application(s) and/or declaration(s), as filed or as amended, may be granted and/or permitted to become effective.

Entergy Corporation, et al. (70–7561)

Entergy Corporation ("Entergy"), 225 Baronne Street, New Orleans, Louisiana 70112, a registered holding company, and its subsidiaries, System Energy Resources, Inc. ("SERI"), 1340 Echelon Parkway, Jackson, Mississippi 39213, Arkansas Power & Light Company ("AP&L"), 425 West Capitol Street, Little Rock, Arkansas 72201, Louisiana Power & Light Company ("LP&L"), 639 Loyola Avenue, New Orleans, Louisiana 70113, Mississippi Power and Light Company ("MP&L"), 308 East Pearl Street, Jackson, Mississippi 39201, and New Orleans Public Service Inc. ("NOPSI"), 639 Loyola Avenue, New Orleans, Louisiana 70113, (collectively, "Applicants") have filed a post-effective amendment to their declaration under Sections 6(a), 7 and 12(b) of the Act and Rules 45 and 50 thereunder.

By order dated December 23, 1988 (HCAR No. 24791), in connection with the equity funding of the sale and leaseback of Grand Gulf Nuclear Generating Station, Unit I ("Grand Gulf I") ("Lease"), consummated by SERI on December 28, 1988, the Applicants were authorized, among other things, to obtain financial support in the form of a letter of credit ("LOC"), which was provided by the Fuji Bank, Limited ("LOC Bank") to secure the payment to the owner-lessor ("Owner") of the net casualty value ("Net Casualty Value"), as defined in the Lease, which might be payable from time-to-time by SERI under the Lease. Upon the occurrence of certain events, the Owner would be entitled to draw on the LOC in amounts equal to amounts owed by SERI under the Lease for the Net Casualty Value. Pursuant to the Reimbursement Agreement, dated as of December 1, 1988 ("Reimbursement Agreement"), SERI was also authorized to reimburse the LOC Bank at its prime rate, certificate of deposit rate of the LIBOR, at SERI's option, for amounts drawn under the LOC. SERI was further authorized to assign, for the benefit of the LOC Bank, an administrating bank ("Administrating Bank") and the participating banks ("Participating Banks"), its rights under: (1) An Availability Agreement, dated as of June 21, 1974 ("Availability Agreement"), among itself, AP&L, LP&L, MP&L and NOPSI, consented to and joined in by AP&L, LP&L, MP&L and NOPSI; and (2) a Capital Funds Agreement, dated as of June 21, 1974, ("Capital Funds Agreement"), between itself and Entergy, consented to and joined in by Entergy. The initial LOC was scheduled to terminate on December 28, 1991.

On January 14, 1991, pursuant to a further order of the Commission dated January 11, 1991 (HCAR No. 25241) ("1991 Order"), the original LOC was cancelled and replaced by a new LOC issued by Bank of Tokyo, LTD., Los Angeles Agency ("Bank of Tokyo"), in an aggregate amount of $145,751,800, pursuant to the original Reimbursement Agreement as amended by a first amendment and agreement among SERI, Bank of Tokyo, Chemical Bank, and certain other participating banks. In connection with the new LOC, SERI further assigned, for the benefit of the banks, its rights under the Availability Agreement and the Capital Funds Agreement. The new LOC is scheduled to expire on January 15, 1994. The Applicants propose to cancel the current LOC and replace it with a new LOC ("Replacement LOC"), in compliance with the parameters established in the 1991 Order. The Replacement LOC will expire on January 15, 1997.

Arkansas Power & Light Company (70–7834)

Arkansas Power & Light Company ("AP&L"), 425 West Capitol, 40th Floor, Little Rock, Arkansas 72201, an electric public-utility subsidiary company of Entergy Corporation, a registered holding company, has filed a post-effective amendment to its application-declaration filed with this Commission under Sections 9(a), 10, and 12(c) of the Act and Rule 42 thereunder

By orders dated March 20, 1991 and September 3, 1992 (HCAR Nos. 25278 and 25619, respectively ("Orders"), the Commission, among other things, authorized AP&L, for the period during which any shares of the new preferred stock [1] are outstanding to: (1) Redeem shares of its outstanding New Preferred Stock to be issued under the exemptive provisions of Rule 52, in accordance with any mandatory or optional redemption provisions established at the time of the New Preferred Stock's initial issuance; (2) redeem (or purchase in lieu of redemption) outstanding New Preferred Stock, in accordance with the sinking fund provisions established at the time of the New Preferred Stock's initial issuance. These redemption provisions applied to the New Preferred Stock that was to be issued through December 31, 1993.

AP&L now intends to issue $270 million of New Preferred Stock, through December 31, 1995, under the exemptive provisions of Rule 52 ("Additional Stock"). For the period during which any share of the Additional Stock are outstanding, AP&L proposes to: (1) Redeem shares of its Additional Stock, in accordance with any mandatory or optional redemption provisions established at the time of the Additional Stock's initial issuance; and (2) redeem (or purchase in lieu of redemption) outstanding Additional Stock, in accordance with the sinking

[1] AP&L was authorized to issue and sell shares of its preferred stock, $.01 par value ("Class A Preferred"). The Class A Preferred has an aggregate price payable in the event of involuntary liquidation ("Liquidation Value") not to exceed: (1) $100 million, and/or (2) four million shares of AP&L's preferred stock, cumulative, par value $25; and/ or (3) one million shares of AP&L's preferred stock, cumulative, par value $100; provided, however, that the aggregate of the Liquidation Value of the Class A Preferred issued, together with the total par value of the other classes issued, shall not exceed $100 million (collectively, "New Preferred Stock").

fund provisions established at the time of the Additional Stock's initial issuance.

In addition, AP&L was authorized by the Orders to acquire from time-to-time prior to December 31, 1993, in whole or in part, prior to their respective maturities, certain of AP&L's outstanding securities, up to and including: (1) $350 million aggregate principal amount of one or more series of AP&L's outstanding first mortgage bonds ("First Mortgage Bonds"); (2) $175 million aggregate principal amount of one or more series of the outstanding pollution control revenue bonds and/or solid waste disposal bonds issued for AP&L's benefit; and (3) $150 million aggregate par value of one or more series of AP&L's outstanding preferred stock. AP&L has acquired approximately $151.18 million of the First Mortgage Bonds leaving a balance of approximately $198.82 million of First Mortgage Bonds to be acquired.

AP&L now proposes to extend its authorization, from December 31, 1993 to December 31, 1995 to acquire not to exceed: (1) Approximately $198.82 million aggregate principal amount of the outstanding First Mortgage Bonds; (2) $175 million aggregate principal amount of one or more series of the outstanding pollution control revenue bonds and/or solid waste disposal bonds issued for AP&L's benefit; and (3) $150 million aggregate par value of one or more series of AP&L's outstanding preferred stock.

UNITIL Corporation (70–8090)

UNITIL Corporation ("UNITIL"), 216 Epping Road, Exeter, New Hampshire 03833, a registered holding company, has filed an application-declaration under Sections 6(a), 7, 9(a), 10, and 12(c) of the Act and Rules 42 and 50(a)(5) thereunder.

UNITIL seeks authorization for its management performance compensation program ("Program") through December 31, 1998. Under the Program, key employees, approximately 21 in number but which may increase, will be eligible to receive awards of common stock and cash. To implement the Plan, UNITIL proposes to distribute up to 83,400 shares of its common stock, no par value, to be acquired on the open market, or alternatively, to distribute up to 83,400 authorized but unissued shares of UNITIL's common stock. In addition, UNITIL proposes to distribute 1,818 shares of currently available common stock.

The UNITIL performance committee ("Committee"), comprised of the Chief Executive Officer, President, and Executive Vice President of UNITIL, administers the Program. The Committee selects which eligible employees will participate in the Program and calculates the amount of each award based on the performance of UNITIL and the performance of the employee measured against certain defined criteria. Committee members are eligible to receive awards under the program.

The criterion for measuring each participating employee's performance is the employee's achievement of annual individual performance goals set by the head of that employee's division and the Committee. The maximum annual award payable under the Program ranges from 15% to 37.5% of a participant's base salary range midpoint.

UNITIL states that approximately 70% of each years's annual award is paid on a cash basis while the remaining portion of the award is paid through a distribution of common stock. UNITIL anticipates that the Program will be fully funded by income provided from operating activities and that external borrowing will not be used to meet the requirements of the Program. According to UNITIL, the costs of the Program awards are paid directly by the UNITIL system company that pays each participant's base salary during the performance period.

UNITIL states that the common stock distributed as awards is generally purchased from time to time by UNITIL on the open market, with the value of the award based on the stock price at the time of purchase by UNITIL, but may also consist of authorized but unissued shares of common stock. At the present time, UNITIL plans to continue to make open market purchases to meet the requirements of the Program because of the relatively small size of the stock purchases and the negligible impact the market purchases of common stock have on UNITIL's trading volume, price per share, and capital structure. However, should UNITIL decide to issue authorized but unissued shares of its common stock, UNITIL requests an exception from the competitive bidding requirements of Rule 50(a)(5).

Jersey Central Power & Light Company, et al. (70–8289)

Jersey Central Power & Light Company ("JCP&L"), 300 Madison Avenue, Morristown, New Jersey 07960; Metropolitan Edison Company ("Met-Ed"), 2800 Pottsville Pike, Reading, Pennsylvania 19605 and Pennsylvania Electric Company ("Penelec"), 1001 Broad Street, Johnstown, Pennsylvania 15907, all public-utility subsidiary companies of General Public Utilities Corporation ("GPU"), a registered holding company, have filed an application under sections 9(a) and 10 of the Act.

JCP&L, Met-Ed and Penelec ("GPU Subsidiaries") propose from time to time to enter into operation and maintenance agreements ("O&M Agreements") with non-utility generation facilities ("NUGs"), (i) with which a GPU Subsidiary, has entered into a power purchase agreement, or (ii) which are otherwise located either within the service territory of one of the GPU Subsidiaries or that of an adjacent utility. The fees and other terms and conditions of each O&M Agreement will be negotiated between the GPU Subsidiary and the NUG facility owner, and are expected to be market-based.

Since the enactment of the Public Utility Regulatory Policies Act of 1978 ("PURPA"), the GPU Subsidiaries have entered into a number of long-term power purchase agreements with developers of NUGs. These NUGs are "qualifying facilities" under PURPA and the regulations thereunder of the Federal Energy Regulatory Commission or, more recently, "exempt wholesale generators" as defined in section 32 of the Act. The majority of these facilities are located within the service territory of the GPU Subsidiary which has executed the related power purchase agreement, and the remaining facilities are located within the service territory of an adjacent utility which has entered into a wheeling agreement to transmit the facilities' energy to the GPU Subsidiary.

The GPU Subsidiaries have from time to time been offered the opportunity, and anticipate future requests, to enter into O&M Agreements to provide, for a fee, operation and maintenance services ("O&M Services") to NUGs with which they have a power purchase agreement. The GPU Subsidiaries also anticipate the opportunity to enter into O&M Agreements with other NUG facilities within their service territories or adjacent electric utility service territories.

O&M Services might typically consist of one or more of the following: pre-start-up service, operation staff development and long-term operation, maintenance and administration. The GPU Subsidiaries expect that O&M Services for NUGs would be undertaken by available personnel and would involve the use of only a limited amount of such resources.

American Electric Power Company, Inc., et al. (70–8293)

American Electric Power Company, Inc. ("AEP"), a registered holding

company, 1 Riverside Plaza, Columbus, Ohio 43215, and its subsidiaries, AEP Generating Company ("Generating"), 1 Riverside Plaza, Columbus, Ohio 43215, Appalachian Power Company ("Appalachian"), 40 Franklyn Road, S.W., Roanoke, Virginia 24011, Columbus Southern Power Company ("Columbus"), 215 North Front Street, Columbus, Ohio 43215, Indiana Michigan Power Company ("Indiana Michigan"), One Summit Square, P.O. Box 60, Fort Wayne, Indiana 46801, Kanawha Valley Power Company ("Kanawha"), 301 Virginia Street East, Charleston, West Virginia 25327, Kentucky Power Company ("Kentucky Power"), 1701 Central Avenue, Ashland, Kentucky 41101, Kingsport Power Company ("Kingsport"), 40 Franklyn Road, S.W., Roanoke, Virginia 24011, Ohio Power Company ("Ohio Power"), 301 Cleveland Avenue, SW., Canton, Ohio 44701, and Wheeling Power Company ("Wheeling"), 51 Sixteenth Street, Wheeling, West Virginia 26003, have filed a declaration under Sections 6(a), 7 and 12(b) of the Act and Rules 45 and 50(a)(5) thereunder.

During the period beginning January 1, 1994 and ending December 31, 1995: (i) AEP, Application, Columbus, Indiana Michigan, Kentucky Power and Ohio Power propose to issue, sell and renew short-term notes to banks and commercial paper to dealers in aggregate principal amounts not to exceed $150 million, $250 million, $200 million, $200 million, $100 million and $250 million, respectively, outstanding at any one time; and (ii) Generating, Kanawha, Kingsport and Wheeling propose to issue, sell and renew short-term notes to banks in aggregate principal amounts not to exceed $50 million, $10 million, $20 million and $20 million, respectively, outstanding at any one time.

All bank notes will mature not more than 270 days after the date of issuance or renewal and none will mature later than June 30, 1996. The companies may be required to maintain balances of up to 10% of the line of credit and to pay fees of up to ⅛ of 1% of the line of credit. The effective annual interest cost, assuming full use of the line of credit, will not exceed 125% of the prime commercial rate in effect from time to time.

The commercial paper notes to be sold by AEP, Appalachian, Columbus, Indiana Michigan, Kentucky Power and Ohio Power will not be prepayable, will have varying maturities not in excess of 270 days after the date of issue, and will be sold directly to a dealer at a discount rate not in excess of the discount rate per annum prevailing at the time of issuance for commercial paper of comparable quality and maturity. The commercial paper dealers will reoffer the commercial paper to investors, generally at a discount rate of up to ⅛ of 1% per annum less than the discount rate at which such commercial paper notes were purchased from the companies. The companies request an exception from the competitive bidding requirements of Rule 50 pursuant to subsection (a)(5) thereunder and authorization to begin negotiations with dealers with respect to the sale and issuance of commercial paper. It may do so.

By orders dated December 7, 1990 (HCAR No. 25201), April 3, 1992 (HCAR No. 25509) and May 23, 1993 (HCAR No. 25817), the Commission, among other things, authorized AEP to make cash contributions of up to $25 million to Appalachian and up to $30 million to Indiana Michigan through December 31, 1993. To date, AEP has not made such contributions. AEP proposes to extend its authority through December 21, 1995 and to increase such authorization by an additional $50 million to Appalachian. AEP expects to make a $15 million capital contribution to Indiana Michigan on or prior to December 31, 1993 and proposes to extend such authorization through December 31, 1995 to make the remaining $15 million contribution and to increase such authorization by an additional $20 million. In addition, AEP proposes to make cash capital contributions from time to time through December 31, 1995 to Columbus, Kentucky Power, Ohio Power, Kingsport and Wheeling up to $15 million, $35 million, $50 million, $5 million and $5 million, respectively.

The proceeds from the borrowings by the companies will be used to pay their general obligations including expenditures incurred in their various construction projects and for other corporate purposes.

National Fuel Gas Company (70–8297)

National Fuel Gas Company ("National"), 30 Rockefeller Plaza, Suite 4545, New York, New York 10112, a registered holding company, and all its wholly owned subsidiary companies, National Fuel Gas Distribution Corporation ("Distribution"), National Fuel Gas Supply Corporation ("Supply"), Empire Exploration, Inc. ("Empire"), Penn-York Energy Corporation ("Penn-York"), Seneca Resources Corporation ("Seneca"), Highland Land & Minerals, Inc. ("Highland"), Enerop Corporation ("Enerop"), Data-Track Account Services, Inc. ("Data-Track"), National Fuel Resources, Inc.("NFR"), all at 10 Lafayette Square, Buffalo, New York 14203, and Utility Constructors, Inc. ("UCI"), East Erie Extension, Linesville, Pennsylvania 16424, ("Subsidiaries") have filed an application-declaration under sections 6(a), 7, 9(a), 10, 12(b) and 12(f) of the Act and rules 43, 45 and 50(a)(5) thereunder.

Applicant-declarants propose that National be authorized to issue and sell commercial paper and/or incur borrowings under short-term credit facilities with banks or other financial institutions and loan the proceeds to its Subsidiaries through December 31, 1995. In addition, authorization is requested to continue a money pool arrangement among National and its Subsidiaries. National also proposes to enter into interest rate and currency exchange agreements in order to achieve interest rate protection with respect to a portion of its short-term indebtedness which may be outstanding from time to time.

National and its Subsidiaries propose to issue and sell short-term securities in amounts up to the following through December 31, 1995:

Company	Amount
National	$10,000,000
Distribution	265,000,000
Supply	120,000,000
Empire	50,000,000
Penn-York	[2] 47,000,000
Seneca	120,000,000
UCI	15,000,000
Highland	5,000,000
Enerop	5,000,000
Data-Track	1,000,000
NFR	20,000,000

[2] Pursuant to a pending application-declaration in File No. 70–8135, National proposes to merge Penn-York into Supply. Upon the consummation of such merger, it is proposed that this borrowing limit be added to the limit of Supply.

Previously, the Commission has authorized short-term loans of surplus funds generated by National and the Subsidiaries between certain subsidiaries participating in a money-pool arrangement (See *e.g.*, HCAR No. 25439, December 23, 1991). National proposes that such intra-system borrowing arrangements be authorized to continue. National will administer the money pool and coordinate its own and the Subsidiaries' short-term borrowings. Money pool funds will be derived from the following sources: (1) Surplus funds of National and the Subsidiaries; (2) proceeds from National's sale of commercial paper; (3) borrowings by National from banks or other financial institutions.

National will not make borrowings from any of the Subsidiaries through the money pool. National's borrowings, if any, will be directly from commercial paper issuances and/or borrowings under its facilities with banks or other financial institutions.

If only internal funds (surplus funds of National and certain Subsidiaries) make up the funds available in the money pool, the interest rate applicable and payable to or by Subsidiaries for all loans of such internal funds will be the lower of the following two rates: (1) The rate for dealer issued 30-day commercial paper quoted in The Wall Street Journal, or (2) the prime rate at Chase Manhattan Bank, N.A.

If only external funds (funds borrowed by National either through commercial paper or loans from banks or other financial institutions) make up the funds available in the money pool, the interest rate applicable to such borrowings and payable by Subsidiaries will be equal to National's net cost for such external borrowings.

In cases where both surplus funds from other participating Subsidiaries and external funds are concurrently borrowed through the money pool, the interest rate payable to the participating Subsidiaries that contributed surplus funds to the money pool will be equal to either: (1) The rate for 30-day commercial paper issued by National having the same issue date as of the date of contribution of the surplus funds, or (2) if National does not issue commercial paper on the date that surplus funds are contributed to the money pool, the lower of: (a) The rate for dealer issued 30-day commercial paper quoted in The Wall Street Journal, or (b) the prime rate at Chase Manhattan Bank, N.A.

The rate applicable to all funds borrowed will be a composite rate, equal to the weighted average of the net cost of funds borrowed externally, and the cost of all surplus funds contributed by the money pool participants. Interest on all borrowings through the money pool will be payable monthly by the Subsidiaries until the principal amount borrowed is fully repaid.

If intra-system sources of funds are insufficient to meet short-term loan requests, National proposes to issue and sell its commercial paper in an aggregate principal amount at any one time outstanding of up to $150 million during the period from January 1, 1994, through December 31, 1995. National will make the proceeds therefrom available to its Subsidiaries through the money pool.

National expects to sell the commercial paper in minimum sales amounts of not less than $50,000 and note denominations of not less than $25,000 with varying maturities not to exceed nine months. The commercial paper will not be prepayable prior to maturity. No commission will be payable in connection with the issuance and sale of the commercial paper; however, the dealer/placement agent will reoffer and sell the commercial paper at a discount rate of ⅛ of 1% per annum less than the prevailing discount rate granted by the dealer/placement agent to National.

National proposes to establish credit facilities with various banks and/or other financial institutions and to issue and sell from time to time during the period from January 1, 1994 through December 31, 1995, short-term unsecured notes in an aggregate principal amount not to exceed $400 million. These proceeds will be made available to the Subsidiaries through the money pool. The notes issued and sold will bear interest at the prime or base rate of interest in effect at each individual bank. In addition to prime or base rate loans, each of these banks may have amounts of funds available, which they will lend to National at fixed rates below the existing prime rate or base rate, for short periods of time (one day to two hundred seventy days) depending upon market conditions. National may find it beneficial to repay outstanding notes at the prime or base rate with funds borrowed at this lower fixed rate. The fixed rate notes may not be prepayable. Therefore, National will not utilize such notes unless it anticipates the need for the funds for at least the maturity of such notes.

National's aggregate principal amount of external short-term unsecured notes and commercial paper (which is subject to a limit of $150 million) outstanding at any one time shall never exceed $400 million.

In addition to the credit facilities noted above, National has obtained a committed credit facility of $113 million which is shared among various banks and is administered by Chase Manhattan Bank, N.A., as their agent. This committed facility acts as a back-up for National's commercial paper facilities.

In addition to the commercial paper and credit facilities discussed above, National proposes to enter into interest rate and currency exchange agreements ("Swap Agreement(s)") with one or more parties ("Counterparty") on or before December 31, 1995. The term of each Swap Agreement could range from one month up to thirty years. National proposes that the maximum principal amount of outstanding debt that would be covered under the Swap Agreements would not exceed $200,000,000.

From time to time, National may be obligated to pay arrangement fees and/or legal fees and other expenses in connection with these Swap Agreements. National requests authority to allocate all such fees and expenses together with the payments made to a Counterparty or received from a Counterparty among all applicant-declarants based upon their weighted average amount of borrowings outstanding during the period when such amounts are paid or received.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93–28453 Filed 11–18–93; 8:45 am]

BILLING CODE 8010–01–M

DEPARTMENT OF STATE

Office of the Secretary

[Public Notice 1903]

Extension of the Restriction on the Use of the United States Passport for Travel To, In, or Through Libya

On December 11, 1981, pursuant to the authority of 22 U.S.C. 211a and Executive Order 11295 (31 FR 10603), and in accordance with 22 CFR 51.73(a)(3), all United States passports were declared invalid for travel to, in, or through Libya unless specifically validated for such travel. This restriction has been renewed yearly because of the unsettled relations between the United States and the Government of Libya and the threats of hostile acts against Americans in Libya.

The Government of Libya still maintains a decidedly anti-American stance and continues to emphasize its willingness to direct hostile acts against the United States and its nationals. The American Embassy in Tripoli remains closed, thus preventing the United States from providing routine diplomatic protection or consular assistance to Americans who may travel to Libya.

In light of these events and circumstances, I have determined that Libya continues to be an area "* * * where there is imminent danger to the public health or physical safety of United States travelers."

Accordingly, all United States passports shall remain invalid for use in travel to, in, or through Libya unless specifically validated for such travel under the authority of the Secretary of State.

The Public Notice shall be effective upon publication in the **Federal Register** and shall expire at the end of one year unless sooner extended or revoked by Public Notice.

Dated: November 11, 1993.

Warren Christopher,

Secretary of State.

[FR Doc. 93–28447 Filed 11–18–93; 8:45 am]

BILLING CODE 4710–45–M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Research and Development Programs Meeting

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice.

SUMMARY: This notice announces a public meeting at which NHTSA will describe and discuss specific research and development projects.

DATES AND TERMS: The National Highway Traffic Safety Administration will hold a public meeting devoted primarily to presentations of specific research and development projects on December 15, 1993, beginning at 1 p.m. and ending at approximately 4:30 p.m. Questions may be submitted in advance regarding the Agency's research and development projects. They must be submitted in writing by December 8, 1993 to the address given below. If sufficient time is available, questions received by the December 8 date will be answered at the meeting in the discussion period. The individual, group or company asking a question does not have to be present for the question to be answered. A consolidated list of the questions submitted by December 8 will be available at the meeting and will be mailed to requesters after the meeting.

ADDRESSES: The meeting will be held at Department of Transportation Building, 400 7th Street SW, Washington, DC, in room 2230 (in the southeast corner). Questions for the December 15, 1993 meeting relating to the Agency's research and development programs should be submitted to George L. Parker, Associate Administrator for Research and Development, NRD–01, National Highway Traffic Safety Administration, room 6206, 400 Seventh St. SW., Washington, DC 20590. The fax number is 202–366–5930.

SUPPLEMENTARY INFORMATION: NHTSA intends to provide detailed presentations about its research and development programs in a series of quarterly public meetings. The purpose is to make available more complete and timely information regarding the Agency's research and development programs. At the first meeting, on April 6, 1993, NHTSA officials from the Office of Research and Development provided a summary overview of research and development projects in the areas of crashworthiness and crash avoidance. At the second meeting, held on June 23, 1993, NHTSA staff gave detailed presentations about the agency's frontal and rollover crash protection research projects, including the topics of structural integrity, door latch integrity, and glass-plastic glazing. At the third meeting, held on October 12, 1993, NHTSA staff made presentations about biomechanics research on head, neck and thorax injury mechanisms, crash casual analysis, and driver workload assessment.

The agenda for the meeting on December 15, 1993 follows:

Critical Outcome Data Evaluation System (CODES)—Linkage of databases on police accident reporting and medical outcomes.

Special crash investigations program regarding air bag performance.

Highway traffic injury studies.

Update on improved frontal crash protection.

Upgrade fuel system integrity.

Electric vehicle safety.

Drowsy driver monitoring.

Vehicle motion environment.

Responses to written questions.

Each of these topics will be addressed for approximately 15 to 30 minutes. NHTSA has based its decisions about the agenda, in part, on the suggestions previously received prior to the second and third public meetings. On the next day, the regular quarterly NHTSA Technical Industry Meeting will follow this meeting; it is announced in a separate notice.

Questions regarding research projects that have been submitted in writing in advance will be answered as time permits. A transcript of the meeting and copies of materials handed out at the meeting will be available for public inspection in the NHTSA Technical Reference Section, room 5108, 400 Seventh Street, SW, Washington, DC 20590. Copies of the transcript will then be available at 10 cents a page, upon request to NHTSA Technical Reference Section. The Technical Reference Section is open to the public from 9:30 a.m. to 4 p.m.

NHTSA will provide technical aids to participants as necessary, during the NHTSA Industry Research and Development Meeting. Thus any person desiring assistance of "auxiliary aids" (e.g. sign-language interpreter, telecommunication devices for deaf persons (TTDs), readers, taped texts, braille materials, or large print materials and/or a magnifying device), please contact Barbara Coleman on 202/366–1537 by COB December 8, 1993.

FOR FURTHER INFORMATION CONTACT: Dr. Richard L. Strombotne, Special Assistant for Technology Transfer Policy and Programs, Office of Research and Development, 400 Seventh Street, SW, Washington, DC 20590. Telephone: 202–366–4730. Fax number: 202–366–5930.

George L. Parker,

Associate Administrator for Research and Development.

[FR Doc. 93–28485 Filed 11–18–93; 8:45 am]

BILLING CODE 4910–59–M

Research and Special Programs Administration

Advisory Bulletin Number ADB–93–04

AGENCY: Research and Special Programs Administration (RSPA), Department of Transportation.

ACTION: Advisory to owners and operators of gas and hazardous liquid pipeline facilities.

SUMMARY: This advisory bulletin requests that persons seeking interpretations of pipeline safety regulations include certain information.

Advisory

RSPA requests that owners and operators of gas and hazardous liquid pipelines and other persons requesting interpretation of regulations from the Office of Pipeline Safety (OPS) Washington Office include the following information in the request:

- Specify the regulations to be interpreted and provide adequate information on the circumstances regarding the interpretation requested.
- Specify whether there is a current or past OPS or State interpretation compliance action on the regulation(s) relating to the interpretation requested; and, if so, provide to the State enforcement office or OPS Regional Office a copy of the letter sent to OPS requesting an interpretation.

Background

RSPA often receives requests for interpretations of regulations from operators that have been cited for violation of the regulation(s) involved, and against whom enforcement actions have been initiated. Including information on existing compliance actions with operator requests for

interpretations will help prevent inconsistencies between interpretations given and decisions on compliance or enforcement cases that are in process.

Issued in Washington, DC, on November 16, 1993.

George W. Tenley, Jr.,

Associate Administrator for Pipeline Safety.

[FR Doc. 93–28542 Filed 11–18–93; 8:45 am]

BILLING CODE 4810–60–P

International Standards on the Transport of Dangerous Goods; Public Meeting

AGENCY: Research and Special Programs Administration (RSPA), Department of Transportation.

ACTION: Notice of public meeting.

SUMMARY: This notice is to advise interested persons that RSPA will conduct a public meeting to report the results of the eighth session of the United Nations' Sub-Committee of Experts on the Transport of Dangerous Goods.

DATES: December 7, 1993 at 9:30 a.m.

ADDRESSES: Room 6200–6204, Nassif Building, 400 Seventh Street SW., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Frits Wybenga, International Standards Coordinator, Office of Hazardous Materials Transportation, Department of Transportation, Washington, DC 20590; (202) 366–0656.

SUPPLEMENTARY INFORMATION: This meeting will be held to describe the outcome of the eighth session of the Sub-Committee of Experts on the Transport of Dangerous Goods to be held November 22 through December 1, 1993, in Geneva, Switzerland and to discuss the U.S. delegation's plans for participating in the ninth session of the Sub-Committee to be held from July 4 through 15, 1994. Topics to be covered include: revision of the manual for tests and criteria, packaging requirements for explosives, classification criteria for environmentally hazardous substances, requirements for infectious substances, requirements for multimodal tanks, matters related to Classes 2 (compressed gases) and 8 (corrosives), general packaging and intermediate bulk container requirements, segregation requirements, classification issues related to specific dangerous goods, requirements for dangerous goods in limited quantities, incorporation of a systematic list of entries, international activities related to harmonization of chemical classification and labeling requirements and other proposed amendments to the United Nations Recommendations on the Transport of Dangerous Goods.

The public is invited to attend without prior notification.

Documents

Copies of documents submitted to the eighth session of the UN Sub-Committee meeting may be obtained from RSPA. A listing of these documents is available on the Hazardous Materials Information Exchange (HMIX), RSPA's computer bulletin board. Documents may be ordered by filling out an on-line request form on the HMIX or by contacting RSPA's Dockets Unit (202–366–4453). For more information on the use of the HMIX system, contact the HMIX information center: 1–800–PLANFOR (752–6367); in Illinois, 1–800–367–9592; Monday through Friday, 8:30 a.m. to 5 p.m. Central time.

After the meeting, a summary of the public meeting will also be available from the Hazardous Materials Advisory Council, Suite 250, 1110 Vermont Ave., NW., Washington, DC 20005; telephone number (202) 728–1460.

Issued in Washington, DC, on November 15, 1993.

Robert A. McGuire,

Acting Associate Administrator for Hazardous Materials Safety.

[FR Doc. 93–28502 Filed 11–18–93; 8:45 am]

BILLING CODE 4810–60–M

DEPARTMENT OF VETERANS AFFAIRS

Advisory Committee on Former Prisoners of War; Charter Renewal

This gives notice under the Federal Advisory Committee Act (Pub. L. 92–463) of October 6, 1972, that the Department of Veterans Affairs' Advisory Committee on Former Prisoners of War has been renewed for a 2-year period beginning September 29, 1993, through September 29, 1995.

Dated: November 4, 1993.

By direction of the Secretary.

Heyward Bannister,

Committee Management Officer.

[FR Doc. 93–28438 Filed 11–18–93; 8:45 am]

BILLING CODE 8320–01–M

Sunshine Act Meetings

Federal Register
Vol. 58, No. 222
Friday, November 19, 1993

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

DEPARTMENT OF ENERGY

FEDERAL ENERGY REGULATORY COMMISSION

The following notice of meeting is published pursuant to Section 3(a) of the Government in the Sunshine Act (Pub. L. No. 94–409), U.S.C. 552b:

DATE AND TIME: November 23, 1993, 10:00 a.m.

PLACE: 825 North Capitol Street, N.E., Room 9306, Washington, D.C. 20426.

STATUS: Open.

MATTERS TO BE CONSIDERED: Agenda.

Note—Items listed on the agenda may be deleted without further notice.

CONTACT PERSON FOR MORE INFORMATION: Lois D. Cashell, Secretary; Telephone (202) 208–0400. For a recording listing items stricken from or added to the meeting, call (202) 208–1627.

This is a list of matters to be considered by the Commission. It does not include a listing of all papers relevant to the items on the agenda; however, all public documents may be examined in the Reference and Information Center.

Consent Agenda—Hydro, 990th Meeting—November 23, 1993, Regular Meeting (10 a.m.)

CAH–1.
Project No. 2742–019, Alaska Energy Authority
CAH–2.
Project Nos. 9202–071 and 072, Upper Yampa Water Conservancy District
CAH–3.
Project No. 10047–002, Northern Haydro Consultants, Inc.
Project No. 10514–001, C&A Wallscoverings, Inc.
CAH–4.
Omitted
CAH–5.
Project No. 9042–036, Gallia Hydro Partners

Consent Agenda—Electric

CAE–1.
Docket No. ER94–8–000, Philadelphia Electric Company and Susquehanna Electric Company
CAE–2.
Docket No. ER94–23–000, Northwestern Wisconsin Electric Company
CAE–3.
Docket No. ER94–24–000, Enron Power Marketing, Inc.
CAE–4.
Docket No. ER93–412–000, Northern States Power Company
CAE–5.
Docket Nos. ER93–507–000 and ER93–465–000, Florida Power & Light Company
CAE–6.
Docket No. ER93–734–000, Westmoreland-LG&E Partners
CAE–7.
Docket No. ER93–777–000, Commonwealth Edison Company
CAE–8.
Docket Nos. ER93–984–000, ER93–876–000 and ER93–907–000, Pennsylvania Electric Company
CAE–9.
Docket No. ER93–940–000, Boston Edison Company
CAE–10.
Docket No. ER91–457–000, Central Maine Power Company
Docket Nos. ER92–286–004, ER92–484–003, ER92–512–003, ER92–817–003 and ER93–130–003, New England Power Company
CAE–11.
Docket No. ER93–465–001, Florida Power & Light Company
CAE–12.
Omitted
CAE–13.
Docket No. ER93–413–001, Pacific Gas and Electric Company
CAE–14.
Docket Nos. ER93–150–001 and EL93–10–001, Boston Edison Company
CAE–15.
Docket No. RM93–10–001, New Reporting Requirement Implementing Section 123(b) of the Federal Power Act and Supporting Expanded Regulatory Responsibilities Under the Energy Policy Act of 1992, and Conforming and Other Changes to Form No. FERC–714
CAE–16.
Docket No. RM94–5–000, Treatment of Responses to FERC Form No. 580 Interrogatories
CAE–17.
Omitted
CAE–18.
Docket No. EL93–14–000, Western Resources, Inc.

Consent Agenda—Oil and Gas

CAG–1.
Docket No. RP94–31–000, CNG Transmission Corporation
CAG–2.
Docket Nos. RP94–34–000 and 001, Colorado Interstate Gas Company
CAG–3.
Docket No. RP94–36–000, Texas Eastern Transmission Corporation
CAG–4.
Docket No. RP94–37–000, Alabama Tennessee Natural Gas Company
CAG–5.
Docket Nos. RP94–38–000 and 001, Texas Gas Transmission Corporation
CAG–6.
Docket No. RP94–39–000, Tennessee Gas Pipeline Company
CAG–7.
Docket No. RP94–34–000, National Fuel Gas Supply Corporation
CAG–8.
Docket Nos. TM94–2–17–000 and 001, Texas Eastern Transmission Corporation
CAG–9.
Docket No. TM94–2–22–000, CNG Transmission Corporation
CAG–10.
Docket No. RP94–34–000, Algonquin Gas Transmission Company
CAG–11.
Docket No. RP94–43–000, ANR Pipeline Company
CAG–12.
Docket No. RP94–44–000, National Fuel Gas Supply Corporation
CAG–13.
Docket No. RP94–14–000, Algonquin Gas Transmission Company
CAG–14.
Docket Nos. RP93–17–002, 001 and RP86–119–020, Tennessee Gas Pipeline Company
CAG–15.
Docket No. RP93–6–000, Dow Pipeline Company
CAG–16.
Omitted
CAG–17.
Docket Nos. RP93–109–007 and 008, Williams Natural Gas Company
CAG–18.
Docket No. RP94–42–000, Gulf States Transmission Corporation
CAG–19.
Docket No. RP93–175–000, Williston Basin Interstate Pipeline Company
CAG–20.
Docket Nos. RP91–161–016, RP92–3–009, RP90–108–022, RP91–82–013 and RS92–5–009, Columbia Gas Transmission Corporation
Docket Nos. RP91–160–013, RP92–2–009, RP90–107–019 and RS92–6–009, Columbia Gulf Transmission Company
CAG–21.
Docket No. RP93–192–003, Texas Eastern Transmission Corporation
CAG–22.
Docket No. FA91–34–002, Tennessee Gas Pipeline Company
CAG–23.
Docket No. RP93–189–001, Texas Gas Transmission Corporation
CAG–24.
Docket Nos. RP93–181–001 and RP93–125–003, Texas Eastern Transmission Corporation
CAG–25.

Docket Nos. RP93–175–000, 002 and RS92–13–007, Williston Basin Interstate Pipeline Company
CAG–26.
Docket Nos. RP93–187–003, CP88–546–006 and RP93–62–007, Equitrans, Inc.
CAG–27.
Docket No. RP93–186–002, Carnegie Natural Gas Company
CAG–28.
Docket Nos. RP93–125–000 and 001, Texas Eastern Transmission Corporation
CAG–29.
Docket Nos. RP91–203–029, RP92–132–030, RP92–160–002, CP89–629–028, CP90–639–017, CP91–2206–007 and RS92–23–009, Tennessee Gas Pipeline Company
CAG–30.
Docket No. RP93–161–001, Columbia Gas Transmission Corporation
CAG–31.
Docket No. RP93–172–002, Panhandle Eastern Pipe Line Company
CAG–32.
Docket No. RP93–162–002, Transcontinental Gas Pipe Line Company
CAG–33.
Docket No. RP92–215–003, Columbia Gas Transmission Corporation
CAG–34.
Docket No. AI93–4–001, Accounting for Postretirement Benefits Other Than Pensions
CAG–35.
Docket Nos. IS93–22–000, IS93–24–000 and IS93–39–000, Kock Pipelines, Inc.
CAG–36.
Docket Nos. IS93–36–000, Exxon Pipeline Company
CAG–37.
Docket Nos. RP90–2–001, McWhirter Distributing Company, Inc.
CAG–38.
Docket No. RP87–2–000, RFB Petroleum, Inc.
CAG–39.
Docket No. RO88–8–000, Elk Trading Company and Neal Davis
CAG–40.
Docket Nos. GP83–11–002 and RI83–9–003, Colorado Interstate Gas Company
CAG–41.
Docket No. RS92–36–003, Mobil Bay Pipeline Company
CAG–42.
Docket No. RS92–24–011, Texas Gas Transmission Corporation
CAG–43.
Docket No. RS92–46–007, Pacific Gas Transmission Company
CAG–44.
Docket Nos. RS92–5–008, RP90–108–021, RP91–82–012, RP91–161–015, RP92–3–008, RP93–66–002 and RP93–115–002, Columbia Gas Transmission Corporation
Docket Nos. RS92–6–008, R5P90–107–018, RP91–160–012, RP92–2–008, and CP93–736–001, Columbia Gulf Transmission Company
CAG–45.
Docket Nos. RS92–28–000, 013, RP93–14–015, and CP93–77–003, Algonquin Gas Transmission Company
CAG–46.
Docket No. RS92–57–004, Canyon Creek Compression Company
CAG–47.
Docket No. RS92–63–007, Great Lakes Gas Transmission Limited Partnership
CAG–48.
Docket Nos. RS92–81–004, and RP91–212–010, Stingray Pipeline Company
CAG–49.
Docket No. RS92–85–004, Trailblazer Pipeline Company
CAG–50.
Docket Nos. RS92–86–011, RP92–108–009, and RP–92–137–019, Transcontinental Gas Pipe Line Corporation
CAG–51.
Docket No. CP92–668–003, Southern Natural Gas Company and South Georgia Natural Gas Company
CAG–52.
Docket No. CP93–117–001, San Diego Gas & Electric Company
Docket No. CP93–119–001, Southern California Gas Company and San Diego Gas & Electric Company
Docket No. CP93–98–001, Gas Company of New Mexico, a Division of Public Service Company of New Mexico
CAG–53.
Docket No. CP93–64–000, Texas Gas Transmission Corporation
CAG–54.
Docket Nos. CP92–580–000, 001, CP92–581–000, 001, CP93–252–000 and CP93–253–000, El Paso Natural Gas Company
CAG–55.
Docket No. CP92–595–000, Great Lakes Gas Transmission Limited Partnership
CAG–56.
Docket No. CP92–606–000, Great Lakes Gas Transmission Limited Partnership
CAG–57.
Omitted
CAG–58.
Omitted
CAG–59.
Docket No. RP94–22–000, Overthrust Pipeline Company
CAG–60.
Docket No. CP93–333–000, Meridian Oil, Inc. v. Southern California Gas Company and Pacific Gas and Electric Company
Docket No. RS92–60–000, El Paso Natural Gas Company
Docket No. RS92–87–000, Transwestern Pipeline Company
CAG–61.
Docket Nos. RS92–86–013, RP92–108–010 and RP92–137–020, Transcontinental Gas Pipe Line Corporation

Hydro Agenda

H–1.
Omitted

Electric Agenda

E–1.
Reserved

Oil and Gas Agenda

I. Pipeline Rate Matters

PR–1.
Reserved

II. Restructuring Matters

RS–1.
Docket Nos. RS92–49–003, RS92–74–009, and RP92–204–002 and CP92–668–002, South Georgia Natural Gas Company. Order on compliance and rehearing.
RS–2.
Docket Nos. RS92–4–004, 005, 006, and 007, Colorado Interstate Gas Company. Order on compliance and rehearing.
RS–3.
Docket Nos. RS92–19–003, 004, 007, 008, RP92–104–000 and RP92–131–000, K N Energy, Inc. Order on compliance, clarification and rehearing.
RS–4.
Docket Nos. RS92–20–004 and 005, Mid Louisiana Gas Company. Order on compliance, clarification and rehearing.
RS–5.
Omitted
RS–6.
Docket Nos. RS92–9–004, 006, 007, 005, 008, 002, 003, RP 93–18–000, 002 and 001, Questar Pipeline Company. Order on compliance and rehearing.

III. Pipeline Certificate Matters

PC–1.
Omitted

Dated: November 16, 1993.

Lois D. Cashell,

Secretary.

[FR Doc. 93–28603 Filed 11–17–93; 11:43 am]

BILLING CODE 6717–01–M

FEDERAL DEPOSIT INSURANCE CORPORATION

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b(e)(2)), notice is hereby given that at 10:22 a.m. on Tuesday, November 16, 1993, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session to consider the following:

Recommendation concerning an administrative enforcement proceeding.

Application of Branch Banking and Trust Company, Wilson, North Carolina, requesting permission to acquire a minority interest in a subsidiary which will be engaging as principal in an activity that is not permissible for a subsidiary of a national bank.

Application of Magna Bank of Illinois, Belleville, Illinois, a State nonmember bank and Bank Insurance Fund member, for consent to purchase certain assets and assume certain liabilities of Community Bank of Greater Peoria, Peoria, Illinois, a State nonmember bank and Bank Insurance Fund member, and for consent to establish the seven offices of Community Bank of Greater Peoria as branches of Magna Bank of Illinois.

In calling the meeting, the Board determined, on motion of Director Eugene A. Ludwig (Comptroller of the Currency), seconded by Director Jonathan L. Fiechter (Acting Director, Office of Thrift Supervision), concurred in by Acting Chairman Andrew C. Hove, Jr., that Corporation business required

its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), and (c)(9)(B) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), and (c)(9)(B)).

The meeting was held in the Board Room of the FDIC Building located at 550–17th Street, NW., Washington, DC.

Dated: November 16, 1993.

Federal Deposit Insurance Corporation.

Robert E. Feldman,

Deputy Executive Secretary.

[FR Doc. 93–28618 Filed 11–17–93; 2:13 pm]

BILLING CODE 6714-01-M

FARM CREDIT ADMINISTRATION

Farm Credit Administration Board; Special Meeting

SUMMARY: Notice is hereby given, pursuant to the Government in the Sunshine Act (5 U.S.C. 552b(e)(3)), of the special meeting of the Farm Credit Administration Board (Board).

DATE AND TIME: The special meeting of the Board will be held at the offices of the Farm Credit Administration in McLean, Virginia, on November 18, 1993, from 10:00 a.m. until such time as the Board concludes its business.

FOR FURTHER INFORMATION CONTACT: Curtis M. Anderson, Secretary to the Farm Credit Administration Board, (703) 883–4003, TDD (703) 883–4444.

ADDRESS: Farm Credit Administration, 1501 Farm Credit Drive, McLean, Virginia 22102–5090.

SUPPLEMENTARY INFORMATION: Parts of this meeting of the Board will be open to the public (limited space available), and parts of this meeting will be closed to the public. The matters to be considered at the meeting are:

Open Session

A. Approval of Minutes

B. New Business

1. Regulations

a. Distressed Borrower Notification (Final).

b. Director and Senior Officer Compensation (Proposed).

c. Investments (Final).

Closed Session*

A. Reports

1. Office of Secondary Market Oversight Quarterly Report

Dated: November 17, 1993.

Curtis M. Anderson,

Secretary, Farm Credit Administration Board.

[FR Doc. 93–28653 Filed 11–17–93; 3:32 pm]

BILLING CODE 6705-01-P

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TIME AND DATE: 10:00 a.m., Wednesday, November 24, 1993.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, NW., Washington, DC 20551.

STATUS: Open.

MATTERS TO BE CONSIDERED:

Summary Agenda

Because of its routine nature, no substantive discussion of the following item is anticipated. This matter will be voted on without discussion unless a member of the Board requests that the item be moved to the discussion agenda.

1. Publication for comment of proposed modifications to the Fedwire funds transfer format.

Discussion Agenda

2. Publication for comment of proposed amendments to Regulation L (Management Official Interlocks) to create a new exception from the prohibitions of the Depository Institution Management Interlocks Act for depository organizations controlling a de minimis amount of deposits in a community or metropolitan statistical area.

3. Proposed 1994 Federal Reserve Board budget.

4. Proposed 1994 budget for the Office of Inspector General.

5. Any items carried forward from a previously announced meeting.

Note: This meeting will be recorded for the benefit of those unable to attend. Cassettes will be available for listening in the Board's Freedom of Information Office, and copies may be ordered for $5 per cassette by calling (202) 452–3684 or by writing to: Freedom of Information Office, Board of Governors of the Federal Reserve System, Washington, DC 20551.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204.

Dated: November 17, 1993.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 93–28579 Filed 11-17-93; 10:53 am]

BILLING CODE 6210-01-P

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TIME AND DATE: Approximately 11:30 a.m., Wednesday, November 24, 1993, following a recess at the conclusion of the open meeting.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, NW, Washington, DC. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204. You may call (202) 452–3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: November 17, 1993.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 93–28580 Filed 11–17–93; 10:53 am]

BILLING CODE 6210-01-P

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* Session Closed—Exempt pursuant to 5 U.S.C. 552b(c) (8) and (9).

Corrections

Federal Register
Vol. 58, No. 222
Friday, November 19, 1993

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

DEPARTMENT OF DEFENSE

Office of the Secretary

Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); DRG Revised rates

Correction

In notice document 93-26097 beginning on page 55047 in the issue of Monday, October 25, 1993, make the following corrections:

1. On page 55049, in the table, in the entry for DRG No. 42, in the second column, "petina" should read "retina".

2. On page 55050, in the table, in the first column, the second "64" should read "65".

3. On the same page, in the entry for DRG No. 73, in the third column, "9.6877" should read "0.6877".

4. On the same page, in the entry for DRG No. 93, in the third column, "0.6154" should read "0.6145".

5. On page 55060, in the table, in the entry for DRG No. 614, in the third column, "1.32985" should read "1.3295".

6. On the same page, in the entries for DRG No. 622 and 623, in the second column, in the first line, "W/O" should read "W".

7. On the same page, in the entry for DRG No. 630, in the fifth and sixth columns, "1" should read "2.1" and "2.1" should read "1" respectively.

8. On the same page, in the entry for DRG No. 900, in the second column, in the second line, "<" should read "≤".

BILLING CODE 1505-01-D

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[OH-43-1-5911; FRL-4784-6]

Approval and Promulgation of Implementation Plans; Ohio

Correction

In rule document 93-26018 beginning on page 54513 in the issue of Friday, October 22, 1993, make the following correction:

On page 54516, in the first column, in the last paragraph, in the fifth and sixth lines, "[insert date 60 days from publication]." should read "December 21, 1993."

BILLING CODE 1505-01-D

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 157

[CGD 91-045]
RIN 2115-AE01

Structural and Operational Measures To Reduce Oil Spills From Existing Tank Vessels Without Double Hulls

Correction

In proposed rule document 93-26074 beginning on page 54870 in the issue of Friday, October 22, 1993, make the following corrections:

1. On page 54871, in the first column, in the first full paragraph, in the eighth line from the bottom, "alternative" should read "alternate".

2. On page 54872, in the third column, in the fifth full paragraph, the sixth and seventh lines should read "provide as substantial protection to the environment as is economically and".

3. On page 54873, in the first column, in the third full paragraph, in the second line from the bottom, "not" should read "no".

4. On the same page, in the 3rd column, in the 18th line from the top, "96" should read "95".

5. On page 54874, in the first column, in the third full paragraph, in the eighth line, "and" should read "an".

6. On the same page, in the second column, in the second full paragraph, in the seventh line, remove the comma after "reducers".

7. On page 54876, in the third column, in the last line, "1977" should read "1997".

8. On page 54877, in the first column, in the first full paragraph, in the eighth line, insert "not" after "are".

9. On page 54878, in the table, in footnote 1, in the first line, insert "date" after "compliance".

BILLING CODE 1505-01-D

federal register

Friday
November 19, 1993

Part II

Environmental Protection Agency

Water Pollution Control, NPDES General Permits and Fact Sheets: Storm Water Discharges From Industrial Activity; Notice

ENVIRONMENTAL PROTECTION AGENCY

[FRL–4797–7]

Fact Sheet For the Multi-Sector Stormwater General Permit

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: The following provides notice for draft NPDES general permits and accompanying fact sheets for storm water discharges associated with industrial activity in the following Regions:

Region I—for the States of Maine, Massachusetts, and New Hampshire; for Indian lands located in Connecticut, Massachusetts, New Hampshire, Maine, Rhode Island, and Vermont; and for Federal facilities in Vermont.

Region II—for the Commonwealth of Puerto Rico; for Indian lands located in New York; and for Federal facilities in the U.S. Virgin Islands.

Region III—for the District of Columbia and for Federal facilities in Delaware.

Region IV—for the State of Florida; and for Indian lands located in Alabama, Florida, Mississippi, and North Carolina.

Region VI—for the States of Louisiana, New Mexico, Oklahoma, and Texas; and for Indian lands located in Louisiana, New Mexico (except Navajo lands and Ute Mountain Reservation lands), Oklahoma, and Texas.

Region VIII—for the State of South Dakota; for Indian lands located in Colorado, Montana, North Dakota, South Dakota, Utah (except Goshute Reservation and Navajo Reservation lands), and Wyoming; for the portion of the Pine Ridge Reservation located in Nebraska; for the Ute Mountain Reservation in Colorado and New Mexico; and for Federal facilities in Colorado.

Region IX—for the State of Arizona; for the Territories of American Samoa, Guam, Johnston Atoll, and Midway and Wake Island; for the Commonwealth of the Northern Mariana Islands; for the Republic of Palau (Trust Territory of the Pacific Islands); and for Indian lands located in California and Nevada; and for the Goshute Reservation in Utah and Nevada, the Navajo Reservation in Utah, New Mexico, and Arizona, the Duck Valley Reservation in Nevada and Idaho; and the Fort McDermitt Reservation in Oregon and Nevada.

Region X—for the State of Alaska, and Idaho; for Indian lands located in Alaska, Oregon (except for Fort McDermitt Reservation lands), Idaho (except Duck Valley Reservation lands), and Washington; and for Federal facilities in Washington.

The proposed permit is intended to cover storm water discharges associated with industrial activity to waters of the United States, including discharges through large and medium municipal separate storm sewer systems, and through other municipal separate storm sewer systems. The proposed permit is intended to cover discharges from the following types of industrial activities: lumber and wood products facilities; paper and allied products manufacturing facilities; chemical and allied products manufacturing facilities; asphalt paving and roofing materials manufacturers and lubricants; stone, clay, glass and concrete products facilities; primary metals facilities; metal mines (ore mining and dressing); coal mines; oil and gas extraction facilities; nonmetallic mines and quarries; hazardous waste treatment, storage or disposal facilities; landfills, land application sites and open dumps; automobile salvage yards; scrap and waste material processing and recycling facilities; steam electric power generating facilities; railroad transportation facilities, local and suburban transit and interurban highway passenger transportation facilities, petroleum bulk oil stations and terminals, motor freight transportation facilities and U.S. Postal Service facilities; water transportation facilities; ship or boat building/repair facilities; airports; wastewater treatment plants; food and kindred products facilities; textile mills, apparel and other fabric manufacturing facilities; furniture and fixture manufacturing facilities; printing and publishing facilities; rubber and miscellaneous plastic product manufacturing facilities; leather tanning and finishing facilities; facilities that manufacture fabricated metal products, jewelry, silverware, and plated ware; facilities that manufacture transportation equipment, industrial, or commercial machinery; and facilities that manufacture electronic equipment and components, photographic and optical goods. Publication of these draft general permits and fact sheets is designed to comply with the requirements of 40 Code of Federal Regulations (CFR) 124.10 simultaneously for all draft general permits being noticed today.

The language of the proposed permit is provided as an appendix to the preamble of this notice. Most conditions of the draft general permits are intended to apply to all of the general permits indicated above. Where conditions in different permits vary by State, these differences are indicated in the appendix.

DATES: Comments on the proposed permit must be received on or before February 17, 1994. See supplementary information for scheduled public hearings.

ADDRESSES: The public should send an original and two copies of their comments addressing any aspect of this notice to proposed NPDES general permit comment clerk; Water Docket MC–4101; Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. To ensure that EPA can read, understand, and therefore properly respond to comments, the Agency requests commentors to type or print in ink any comments. Each comment should cite the page number and, where possible, the section(s) and/or paragraph(s) in the proposed permit to which the comment relates. Commentors should use a separate paragraph for each issue discussed. The complete administrative record is available through the Water Docket MC–4101, Environmental Protection Agency, 401 M Street SW., Washington DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For further information on the proposed NPDES storm water general permit, contact the NPDES Storm Water Hotline at (703) 821–4823 or the appropriate EPA Regional Office. The name, address and phone number of the EPA Regional Storm Water Coordinators are provided in Part VI.G. of the fact sheet.

SUPPLEMENTARY INFORMATION:

Hearings

Public hearings and public meetings to discuss the multi-sector storm water general permit are scheduled as follows:

Region I

January 12, 1994, 1–4 p.m., and
January 13, 1994, 7–10 p.m.
Location (for both hearings), Thomas P. O'Neill Jr. Federal Building, Auditorium (1st Floor), 10 Causeway Street, Boston, Massachusetts

Region II

January 18, 1994, 1:30–5 p.m. and 7–9 p.m.,
Location, Puerto Rico Water Quality Board, National Bank Plaza Building, 431 Ponce De Leon Avenue, Hato Rey, Puerto Rico 00917

Region IV

January 10, 1994, 1–4 p.m. Public Meeting, 7–10 p.m. Public Meeting

Location, Holiday Inn—Ashley Plaza, Convention Center, 111 West Fortune Street, Tampa, Florida 33602
January 13, 1994, 1–4 p.m. Public Meeting, 7–10 p.m. Public Meeting
Location, Tallahassee-Leon County Civic Center, 505 West Pensacola Street, Tallahassee, Florida 32302

Region VI

January 10, 1994 2 p.m. (public meeting) and 7 p.m. (public hearing)
Location, Maynard Ketcham Bldg., room 326, Adjacent to the LSEQ Building, 7220 Bluebonnet, Baton Rouge, Louisiana, (afternoon/evening)
January 12, 1994 9 a.m. (public meeting and 2 p.m. (public hearing)
Location, Sequoyah Auditorium, 2400 N. Lincoln (in tunnel), Oklahoma City, Oklahoma (morning/afternoon)
January 18, 1994 2 p.m. (public meeting) and 7 p.m. (public hearing)
Location, EPA Conference Center, 12th Floor, First Interstate Bank Building, 1445 Ross Ave., Dallas, Texas (morning/afternoon)
January 19, 1994 2 p.m. (public meeting) and 7 p.m. (public hearing)
Location, North Ballroom, Student Union Building, University of New Mexico, Albuquerque, New Mexico

Region IX

January 13, 1994 1–5 p.m.
Location, Arizona Department of Environmental Quality, Public Meeting Room, 3033 North Central Avenue, Phoenix, Arizona.

Persons wishing to make an oral presentation must restrict themselves to 15 minutes and are encouraged to have written copies of their comments for inclusion in official record.

State Certification

EPA is providing copies of today's proposed permit to States and Indian tribes where the proposed permit will be effective. The States and Tribes will review the permit to insure that the permit will not result in a violation of water quality criteria. EPA will work with the States and Tribes to obtain their certification in accordance with section 401 of the Clean Water Act. EPA will prepare certification for Indian lands where there is no approved Tribe or where the approved tribes has not established water quality standards.

Organization of Today's Proposed Permit

Today's proposed permit covers storm water discharges from a wide variety of industrial activities. Because the conditions which affect the presence of pollutants in storm water discharges vary among industries, today's proposed permit contains industry-specific sections that describe the storm water pollution prevention plan requirements, the numeric effluent limitation requirements and the monitoring requirements for that industry. These industry-specific sections are contained in part XI of today's proposed permit and are described in part VIII of this fact sheet. There are also a number of permit requirements which do not vary from industry to industry. These requirements include the general eligibility discussion, the Notice of Intent requirements and standard permit conditions. These requirements are common to all industries covered by today's proposed permit and may be found in parts I through X. Parts I through VII of this fact sheet describe these common requirements. The following is an outline of this fact sheet.

I. Background
II. Types of Discharges Covered
A. Limitations on Coverage
III. Pollutants in Storm Water Discharges Associated with Industrial Activities in General
1. Loading and Unloading Operations
2. Outdoor Storage
3. Other Outdoor Activities
4. Dust or Particulate Generating Processes
5. Illicit Connections
6. Waste Management
IV. Summary of Options for Controlling Pollutants
A. Non-storm Water Discharges
1. Methods to Identify Non-storm Water Discharges to Separate Storm Sewers
B. Options for Preventing Pollutants in Storm Water
1. Elimination of Pollution Sources
2. Best Management Practices
3. Traditional Storm Water Management Practices
4. Diversion of Discharge to Sewage Treatment Plant
5. End-of-Pipe Treatment
V. The Federal/Municipal Partnership: The Role of Municipal Operators of Large and Medium Municipal Separate Storm Sewer Systems
VI. Summary of Common Permit Conditions
A. Notification Requirement
1. Contents of NOIs
2. Deadlines
3. Municipal Separate Storm Sewer System Operator Notification
4. Notice of Termination
B. Special Conditions
1. Prohibition of Non-storm Water Discharges
2. Releases of Reportable Quantities of Hazardous Substances and Oil
3. Co-located Industrial Facilities
C. Common Pollution Prevention Plan Requirements
1. Pollution Prevention Team
2. Description of Potential Pollution Sources
3. Measures and Controls
4. Comprehensive Site Compliance Evaluation
D. Special Requirements
1. Special Requirements for Storm Water Discharges Associated with Industrial Activity through Large and Medium Municipal Separate Storm Sewer Systems
2. Special Requirements for Storm Water Discharges Associated with Industrial Activity from Facilities Subject to EPCRA Section 313 Requirements
3. Special Requirements for Storm Water Discharges Associated with Industrial Activity from Salt Storage Facilities
4. Consistency With Other Plans
E. Monitoring and Reporting Requirements
1. Overview of Multi-sector Permit Monitoring Conditions
2. Compliance Monitoring
3. Alternate Certification
4. Reporting and Retention Requirements
5. Sample Type
6. Representative Discharge
7. Sampling Waiver
8. Visual Examination of Storm Water Quality
9. SARA Title III, Section 313 Facilities
10. Compliance Monitoring
F. Numeric Effluent Limitations
1. Industry-specific Limitations
2. Coal Pile Runoff
G. Regional Offices
1. Notice of Intent Address
2. Address for Other Submittals
H. Compliance Deadlines
VII. Cost Estimates For Common Permit Requirements
A. Pollution Prevention Plan Implementation
B. Cost Estimates for EPCRA Section 313
C. Cost Estimates for Coal Piles
D. Cost Estimates for Salt Piles
VIII. Special Requirements for Discharges Associated with Specific Industrial Activities
A. Storm Water Discharges Associated With Industrial Activity From Timber Products Facilities
1. Background
2. Coverage Under This Section
3. Industry Profile/Description of Industrial Activities
4. Pollutants Contributing to Storm Water Contamination
5. Options for Controlling Pollutants
6. Special Conditions
7. Storm Water Pollution Prevention Plan Requirements
8. Monitoring and Reporting Requirements
9. Alternative Monitoring Requirements
B. Storm Water Discharges Associated With Industrial Activity From Paper and Allied Products Manufacturing Facilities
1. Industry Profile
2. Pollutants in Storm Water Discharges Associated With Industrial Activity From Paper and Allied Product Manufacturing Facilities
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitation
7. Monitoring and Reporting Requirements
8. Alternative Monitoring
C. Storm Water Discharges Associated With Industrial Activity From Chemical

and Allied Products Manufacturing Facilities
1. Discharges Covered Under This Section
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
9. Cost Estimates
D. Storm Water Discharges Associated With Industrial Activity From Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers
1. Industry Profile
2. Pollutants in Storm Water Discharges Associated with Asphalt Facilities and Lubricant Manufacturers
3. Options for Controlling Pollutants
4. Storm Water Pollution Prevention Plan Requirements
5. Numeric Effluent Limitations
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
E. Storm Water Discharges Associated With Industrial Activity From Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
1. Discharges Covered Under This Section
2. Pollutants in Storm Water Discharges Associated with Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
9. Cost Estimates
F. Storm Water Discharges Associated With Industrial Activity From Primary Metals Facilities
1. Industry Profile
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Discharges Covered Under This Section
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
G. Storm Water Discharges Associated With Industrial Activity From Metal Mining (Ore Mining and Dressing) Facilities
1. Industrial Profile
2. Pollutants Found in Storm Water Discharges From Metal Mining
3. Options for Controlling Pollutants from Metal Mines
4. Discharges Covered Under This Section
5. Storm Water Pollution Prevention Plan Requirements
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
8. Numeric Effluent Limitations
H. Storm Water Discharges Associated With Industrial Activity From Coal Mines and Coal Mining-Related Facilities
1. Industry Profile
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Storm Water Pollution Prevention Plan Requirements
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2. Pollutants in Storm Water Discharges Associated with Oil and Gas Facilities
3. Options for Controlling Pollutants
4. Special Conditions
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6. Numeric Effluent Limitation
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
J. Storm Water Discharges Associated With Industrial Activity From Mineral Mining and Processing Facilities
1. Industry Profile
2. Pollutants in Storm Water Discharges Associated with Mineral Mining and Processing Facilities
3. Options for Controlling Pollutants
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5. Numeric Effluent Limitation
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8. Permitting of Mine Dewatering and Storm Water Discharges
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2. Pollutants in Storm Water Discharges Associated With Hazardous Waste Treatment, Storage, or Disposal Facilities
3. Pollutant Control Measures Required Through Other EPA Programs
4. Options for Controlling Pollutants
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
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L. Storm Water Discharges Associated With Industrial Activity From Landfills and Land Application Sites
1. Industry Profile
2. Potential Pollutant Sources at Landfill and Land Application Sites
3. Pollutant Control Measures Required by Other EPA Programs
4. Options for Controlling Pollutants
5. Storm Water Pollution Prevention Plans Requirements
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
M. Storm Water Discharges Associated With Industrial Activity From Automobile Salvage Yards
1. Industry Profile
2. Pollutants in Storm Water Discharges Associated With Automobile Salvage Yards
3. Options for Controlling Pollutants
4. Pollutant Control Measures Required Through Other EPA Programs
5. Storm Water Pollution Prevention Plan Requirements
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
N. Storm Water Discharges Associated With Industrial Activity From Scrap and Waste Material Processing and Recycling Facilities
1. Pollutants Found in Storm Water Discharges
2. Options for Controlling Pollutants
3. Discharges Covered Under This Section
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
O. Storm Water Discharges Associated With Industrial Activity From Steam Electric Power Generating Facilities, Including Coal Handling Areas
1. Industrial Profile
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3. Storm Water Pollution Prevention Plan Requirements
4. Pollutant Control Measures Required Through Other EPA Programs
5. Numeric Effluent Limitations
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
P. Storm Water Discharges Associated With Industrial Activity From Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United States Postal Service Transportation Facilities
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2. Pollutants Found in Storm Water Discharges From Vehicle and Equipment Maintenance and Cleaning Operations
3. Options for Controlling Pollutants
4. Pollutant Control Measures Required Through Other EPA Programs
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
Q. Storm Water Discharges Associated With Industrial Activity From Water Transportation Facilities That Have Vehicle Maintenance Shops and/or Equipment Cleaning Operations
1. Discharges Covered Under This Section
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Pollutant Control Measures Required Through Other EPA Programs
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Monitoring and Reporting Requirements
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R. Storm Water Discharges Associated With Industrial Activity From Ship and Boat Building or Repairing Yards
1. Discharges Covered Under This Section

2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Pollutant Control Measures Required Through Other EPA Programs
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Numeric Effluent Limitation
8. Monitoring and Reporting Requirements
9. Alternative Monitoring Requirements
10. Cost Estimates
S. Storm Water Discharges Associated With Industrial Activity From Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities
1. Discharges Covered Under This Section
2. Pollutants Found in Storm Water Discharges
3. Special Conditions
4. Storm Water Pollution Prevention Plan Requirements
5. Numeric Effluent Limitation
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
T. Storm Water Discharges Associated With Industrial Activity From Treatment Works
1. Discharges Covered Under this Section
2. Industry Profile
3. Pollutants Found in Storm Water Discharges From Treatment Works
4. Options for Controlling Pollutants
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
U. Storm Water Discharges Associated With Industrial Activity From Food and Kindred Products Facilities
1. Discharges Covered Under this Section
2. Industry Profile
3. Pollutants in Storm Water Discharges Associated with Food and Kindred Products Processing Facilities
4. Notice of Termination
5. Options for Controlling Pollutants
6. Storm Water Pollution Prevention Plan Requirements
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
V. Storm Water Discharges Associated With Industrial Activity From Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities
1. Discharges Covered Under this Section
2. Pollutants in Storm Water Discharges Associated with the Manufacture of Textile Products
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Monitoring and Reporting Requirements
7. Alternative Monitoring Requirements
8. Cost Estimates
W. Storm Water Discharges Associated With Industrial Activity From Wood and Metal Furniture and Fixture Manufacturing Facilities
1. Discharges Covered Under This Section
2. Industry Profile
3. Pollutants in Storm Water Discharges Associated with Furniture and Fixtures Manufacturing Facilities
4. Options for Controlling Storm Water Pollutants
5. Storm Water Pollution Prevention Plan Requirements
6. Monitoring and Reporting Requirements
X. Storm Water Discharges Associated With Industrial Activity From Printing and Publishing Facilities
1. Industry Profile
2. Pollutants Found in Storm Water Discharges from Printing and Publishing Facilities
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitation
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
Y. Storm Water Discharges Associated With Industrial Activity From Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
1. Discharges Covered Under This Section
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
Z. Storm Water Discharges Associated With Industrial Activity From Leather Tanning and Finishing Facilities
1. Discharges Covered Under This Section
2. Special Conditions
3. Pollutants Found in Storm Water Discharges From Leather Tanning Operations
4. Options for Controlling Pollutants
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
8. Alternative Monitoring Requirements
9. Retention of Records
AA. Storm Water Discharges Associated With Industrial Activity From Fabricated Metal Products Industry
1. Discharges Covered Under This Section
2. Industrial Profile
3. Storm Water Sampling Results
4. Options for Controlling Pollutants
5. Special Conditions
6. Storm Water Pollution Prevention Plan Requirements
7. Numeric Effluent Limitations
8. Monitoring and Reporting Requirements
9. Alternative Monitoring Requirements
AB. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery
1. Industry Profile
2. Pollutants Found in Storm Water Discharges From Facilities Which Manufacture Transportation Equipment, Industrial or Commercial Machinery
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitation
7. Monitoring and Reporting Requirements
8. Cost Estimates
AC. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
1. Discharges Covered Under This Section
2. Pollutants Found in Storm Water Discharges
3. Options for Controlling Pollutants
4. Special Conditions
5. Storm Water Pollution Prevention Plan Requirements
6. Numeric Effluent Limitations
7. Monitoring and Reporting Requirements
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IX. Paperwork Reduction Act
X. Regulatory Flexibility Act

I. Background

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act (CWA)) was amended to provide that the discharge of any pollutant to waters of the United States from any point source is unlawful, except if the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

For a number of reasons, EPA and authorized NPDES States have failed to issue NPDES permits for the majority of point source discharges of storm water. Recognizing this, Congress added Section 402(p) to the CWA in 1987 to establish a comprehensive framework for addressing storm water discharges under the NPDES program. Section 402(p)(4) of the CWA clarifies the requirements for EPA to issue NPDES permits for storm water discharges associated with industrial activity. On November 16, 1990 (55 FR 47990), EPA published final regulations which define the term "storm water discharge associated with industrial activity." These regulations also set forth NPDES permit application requirements for storm water discharges associated with industrial activity and storm water discharges from certain municipal separate storm sewer systems. The regulations presented three permit application options for storm water discharges associated with industrial activity. The first option was to submit an individual application consisting of Forms 1 and 2F. The second option was to become a participant in a group application. The third option was to file a Notice of Intent (NOI) to be covered under a general permit in accordance with the requirements of an issued general permit.

The proposal of today's general permit is in response to the second of these three options. Group applications were submitted in two parts. Part 1 of the application was due by September 30, 1991, and part 2 of the application

was due by October 1, 1992. In part 1 of the application, all participants were identified and information on each facility was included, such as industrial activities, significant materials exposed to storm water, and material management activities. For part 1 of the application, groups also identified sampling subgroups to submit sampling data for part 2. Over 1,200 groups with over 60,000 member facilities submitted part 1 applications. Upon review of the part 1 application, if the EPA determined that the application was an appropriate grouping of facilities with complete information provided on each participant, and a suitable sampling subgroup was proposed, the application was approved.

Part 2 of the application consisted of sampling data from each member of the sampling subgroup identified in part 1 of the application. In drafting today's proposed general permit, EPA reviewed both parts of the applications and formulated the proposed permit language noticed today. NPDES authorized States were provided the data from the group applications. Authorized NPDES States may propose and finalize either individual permits for each facility included in the application located in the State, or general permits, if the State has general permit authority.[1] If the State feels additional information is needed from the applicants, the State may ask each or any of the applicants for more information on their facility and/or discharge.

EPA estimates that about 100,000 facilities nationwide discharge storm water associated with industrial activity (not including oil and gas exploration and production operations). The large number of facilities addressed by the regulatory definition of "storm water discharge associated with industrial activity" has placed a tremendous administrative burdens on EPA and States with authorized NPDES programs to issue and administer permits for these discharges.

To provide a reasonable and rational approach to addressing this permitting task, the Agency has developed a strategy for issuing permits for storm water discharges associated with industrial activity. In developing this strategy, the Agency recognized that the CWA provides flexibility in the manner in which NPDES permits are issued,[2] and has used this flexibility to design a workable permitting system. In accordance with these considerations, the permitting strategy (described in more detail in 57 FR 11394) describes a four-tier set of priorities for issuing permits for these discharges:

- *Tier I—Baseline Permitting*—One or more general permits will be developed to initially cover the majority of storm water discharges associated with industrial activity.
- *Tier II—Watershed Permitting*—Facilities within watersheds shown to be adversely impacted by storm water discharges associated with industrial activity will be targeted for individual or watershed-specific general permits.
- *Tier III—Industry-Specific Permitting*—Specific industry categories will be targeted for individual or industry-specific general permits.
- *Tier IV—Facility-Specific Permitting*—A variety of factors will be used to target specific facilities for individual permits.

The proposed general permit accompanying this fact sheet will continue Tier I activities for storm water discharges associated with industrial activity in Alaska, Arizona, Florida, Idaho, Louisiana, Massachusetts, Maine, New Hampshire, New Mexico, Oklahoma, South Dakota, Texas, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands; for Federal facilities and Indian lands in Colorado and Washington, and for Indian lands in Alabama, California, Michigan, Minnesota, Mississippi, Montana, New York, Nevada, North Dakota, New York, Utah, Wisconsin, and Wyoming, the portion of the Pine Ridge Reservation located in Nebraska, and for Federal facilities in Delaware and U.S. Virgin Islands[3] by proposing an industry-specific general permit for group applicants in these States.

II. Types of Discharges Covered

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharge associated with industrial activity" which addresses point source discharges of storm water from eleven major categories of industrial activities. Industrial activities from all of these categories with the exception of construction activities participated in the group application process. The information contained in the group applications indicates that type and amount of pollutants discharged in storm water varies from industrial activity to industrial activity because of the variety of potential pollutant sources present in different industrial activities, as well as the variety of pollution prevention measures commonly practiced by each of the regulated industries. To facilitate the process of developing permit conditions for each of the 1200 group applications submitted, EPA classified groups into 29 industrial sectors where the nature of industrial activity, type of materials handled and material management practices employed were sufficiently similar for the purposes of developing permit conditions. Each of the industrial sectors were represented by one or more groups which participated in the group application process. Table 1 lists each of the industrial activities covered by today's proposed permit, and the corresponding sections of today's fact sheet and permit which discuss the specific requirements proposed for that industry. EPA requests comment upon the proposed grouping of industrial activities into the 29 industry sectors in today's proposed permit.

Coverage under today's proposed general permit is available to storm water discharges from industrial activities represented by the group application process. However, coverage under this proposed permit is not restricted to participants in the group application process. Likewise, group members are not precluded from seeking coverage under other available storm water permits such as EPA's "baseline" general permits for Storm Water Discharges Associated with Industrial Activity, (57 FR 41175 and 57 FR 44412). Group members must consider that the deadlines for preparing and implementing of the pollution prevention plan required under the baseline permit have already expired for existing facilities. Therefore, group members that submit NOIs after October 1, 1993, must have a pollution prevention plan developed and implemented prior to NOI submittal.

[1] As of October 1993, 37 of the 39 NPDES authorized State permitting programs had the authority to issue general permits.

[2] The court in *NRDC v. Train*, 396 F.Supp. 1393 (D.D.C. 1975) *aff'd*, *NRDC v. Costle*, 568 F.2d 1369 (D.C.Cir. 1977), has acknowledged the administrative burden placed on the Agency by requiring permits for a large number of storm water discharges. The courts have recognized EPA's discretion to use certain administrative devices, such as area permits or general permits, to help manage its workload. In addition, the courts have recognized flexibility in the type of permit conditions that can be established, including the use of requirements for best management practices.

[3] In 6 of the 39 States that are authorized to issue NPDES permits for municipal and industrial sources, EPA issues permits for discharges from Federal facilities. State programs do not generally address permitting of discharges from Indian lands, as EPA retains this responsibility. However, this fact sheet only addresses general permits as indicated above. Where EPA is the permit issuing authority for other storm water discharges, either individual permits or a different general permit will be issued.

Unlike the baseline general permits, today's proposed permit does not exclude all storm water discharges subject to effluent limitation guidelines. Four types of discharges subject to effluent limitation guidelines may be covered under today's permit if they are not already subject to an existing or expired NPDES permit. These discharges include contaminated storm water runoff from phosphate fertilizer manufacturing facilities, runoff associated with asphalt paving or roofing emulsion production, runoff from material storage piles at cement manufacturing facilities and coal pile runoff at steam electric generating facilities. The proposed permit does not, however authorize all storm water discharges subject to effluent guidelines. Storm water discharges subject to effluent guidelines for mine drainage under 40 CFR part 440 are not covered under today's permit nor are discharges subject to effluent guidelines for acid or alkaline mine drainage under 40 CFR part 434.

TABLE 1.—Industrial Activities Covered by Today's General Permit

Industrial activity	Fact sheet section describing discharges covered	Permit section describing discharges covered
Timber Products Facilities	VIII.A	XI.A
Paper and Allied Products Manufacturing Facilities	VIII.B	XI.B
Chemical and Allied Products Manufacturing Facilities	VIII.C	XI.C
Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers	VIII.D	XI.D
Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	VIII.E	XI.E
Primary Metals Facilities	VIII.F	XI.F
Metal Mining (Ore Mining and Dressing) Facilities	VIII.G	XI.G
Coal Mines and Coal Mining-Related Facilities	VIII.H	XI.H
Oil and Gas Extraction Facilities	VIII.I	XI.I
Mineral Mining and Processing Facilities	VIII.J	XI.J
Hazardous Waste Treatment, Storage, or Disposal Facilities	VIII.K	XI.K
Landfills and Land Application Sites	VIII.L	XI.L
Automobile Salvage Yards	VIII.M	XI.M
Scrap and Waste Material Processing and Recycling Facilities	VIII.N	XI.N
Steam Electric Power Generating Facilities, Including Coal Handling Areas	VIII.O	XI.O
Vehicle Maintenance or Equipment Cleaning Areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and the United States Postal Service.	VIII.P	XI.P
Vehicle Maintenance Areas and/or Equipment Cleaning Operations at Water Transportation Facilities	VIII.Q	XI.Q
Ship and Boat Building or Repairing Yards	VIII.R	XI.R
Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Area located at Air Transportation Facilities	VIII.S	XI.S
Treatment Works	VIII.T	XI.T
Food and Kindred Products Facilities	VIII.U	XI.U
Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities	VIII.V	XI.V
Wood and Metal Furniture and Fixture Manufacturing Facilities	VIII.W	XI.W
Printing and Publishing Facilities	VIII.X	XI.X
Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries	VIII.Y	XI.Y
Leather Tanning and Finishing Facilities	VIII.Z	XI.Z
Fabricated Metal Products Industry	VIII.AA	XI.AA
Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery	VIII.AB	XI.AB
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods.	VIII.AC	XI.AC

A. Limitations on Coverage

Because of the broad scope of today's proposed permit, most industrial activities currently regulated under the storm water program could be covered by the permit. There are, however, several types of storm water discharges which are not eligible. Storm water discharges subject to an existing NPDES permit are not eligible for coverage under today's proposed permit, except facilities which are currently subject to the baseline general permit. EPA believes that in most cases these discharges are more appropriately covered under terms and conditions of their existing permit. These discharges may be covered under today's proposed permit only when the existing permit has expired and only when the expired permit did not contain numeric effluent limitations more stringent than those in today's proposed permit. Storm water discharges that were subject to an NPDES permit that was terminated are not eligible for coverage under today's proposed permit unless the permit was terminated as a result of the permittee's request. Storm water discharges from industrial activities that are not addressed in the appropriate section of Part XI. (see Table 1) of the proposed permit are not eligible for coverage under this permit. These types of industrial activities were not represented in the group application process. Therefore, EPA has no additional information with which to develop permit requirements beyond those developed for the baseline general permit.

(1) Storm Water Discharges Subject to New Source Performance Standards

Section 306 of the Clean Water Act requires EPA to develop Performance Standards for all New Sources described in that section. These standards apply to all facilities which go into operation after the date the standards are promulgated. Section 511(c) of the Clean Water Act requires the Agency to review all facilities defined as a new source under Section 306 for compliance with the National Environmental Policy Act prior to issuance of a permit under the authority of Section 402 of the CWA. It is the

intent of EPA to comply with this requirement of the ACT.

Facilities which are subject to the performance standards for new sources as described in this section of the fact sheet must provide the Federal Permitting Agency with an Environmental Information Document pursuant to 40 CFR 6.101. This information shall be used by the Agency to evaluate the facility under the requirements of the National Environmental Policy Act (NEPA) in an Environmental Review. The Agency will make a final decision regarding the direct or indirect impact of the discharge. The Agency will follow all administrative procedures required in this process. The permittee must obtain a copy of the Agency's final finding prior to the submittal of a Notice of Intent to be covered by this general permit. In order to maintain eligibility, the permittee must implement any mitigation required of the facility as a result of the NEPA review process. Failure to implement mitigation measures upon which the Agency's NEPA finding is based is grounds for termination of permit coverage. In this way, EPA has established a procedure which allows for the appropriate review procedures to be completed by this Agency prior to the issuance of a permit under Section 402 of the CWA to an operator of a facility subject to the new source performance standards of Section 306 of the CWA. EPA believes that it has fulfilled its requirements under NEPA for this federal action under Section 402 of the CWA.

EPA is requesting comments on this procedure to provide "New Source" facilities with general permit coverage in order to provide as many facilities as possible with permit coverage in light of EPA's diminishing resources and increasing mandate to protect our natural resources and environment.

(2) Historic Preservation

The National Historic Preservation Act prohibits Federal actions that would impact a site that either is listed on or is eligible for listing on the National Historic Register. EPA therefore cannot issue permits to discharges that may impact historic sites unless measures will be taken to prevent or mitigate any adverse impact. Therefore, under today's proposed permit a storm water discharge may be covered only if the discharge will not disturb a site that is listed or is eligible to be listed in the National Historic Register, or the operator has obtained and is in compliance with a written agreement signed by the State Historic Preservation Officer (SHPO) that outlines measures to be taken to mitigate or prevent adverse effects to the historic site. EPA has initiated discussions with American Commission on Historic Preservation (ACHP) on this issue.

(3) Endangered Species

The Endangered Species Act (ESA) of 1973, as amended, essentially prohibits actions that would jeopardize the continued existence of an endangered species. ESA regulations also requires the Agency to ensure that any actions authorized, funded, or carried out by the agency (e.g., NPDES permits authorizing discharges to waters of the United States) are not likely to jeopardize the continued existence of any listed or proposed endangered or threatened species or adversely modify or destroy critical habitat of such species (see 50 CFR 402 and 40 CFR 122.49(c)). The "effects of the action" is measured from the "environmental baseline" (see 50 CFR 402.2).

Under ESA Section 10, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) are authorized to issue incidental take permits for actions that would result in an adverse effect ("take"), but would not jeopardize the continued existence of the endangered species. The Section 10 permitting process involves a comprehensive evaluation of the effects of the action, and limits the adverse impacts of the activity. EPA believes these Section 10 permits would provide the necessary level of protection of endangered species under the ESA. A Section 10 permit issued to a facility, would also set the environmental baseline from which to measure the impacts of NPDES permit issuance. If there is "no effect," a Section 10 permit is not necessary.

To fulfill our responsibility to protect endangered species, the Agency will only allow coverage under this multi-sector general permit for facilities which either (1) have no effect on a species listed or proposed to be listed as threatened or endangered, or (2) those facilities for which a Section 10 permit has been issued by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service. By allowing coverage under this general permit for those facilities which are covered for incidental "takes" by a Section 10 permit from U.S. Fish and Wildlife, EPA has provided a permitting option for those facilities which may operate in the habitat area of an endangered species but have taken all the appropriate steps to mitigate adverse impacts of the permitted activity.

To further ensure that dischargers with endangered species impacts do not inadvertently submit NOIs, the applicant will be required to certify they have read and understand the eligibility requirements of the permit, including those applicable to ESA. This certification will serve to focus the applicant's attention on the eligibility requirements and additional responsibilities which must be satisfied for coverage under this general permit.

(4) Region-specific Permit Coverage Limitations

Addendum G of today's proposed permit contains the following limitation on coverage for facilties located in Oklahoma.

This permit will not cover discharges to Oklahoma Outstanding Resource Waters and Scenic Rivers. This limitation applies to "new" point source discharges of storm water associated with industrial activity (those commencing after the June 25, 1992, effective date of the Oklahoma Water Quality Standards—Oklahoma Annotated Code Title 785, Chapter 45) to the following waters:

(a) Waterbodies designated as "Outstanding Resource Waters" and/or "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards;

(b) Oklahoma waterbodies located within the watersheds of waterbodies designated as "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards; and

(c) Waterbodies located within the boundaries of Oklahoma Water Quality Standards Appendix B areas which are specifically designated as "Outstanding Resource Waters" in Appendix A of the Oklahoma Water Quality Standards.

This limitation is necessary to include the more stringent "no new sources" requirements of the Oklahoma Water Quality Standards for these waters.

III. Pollutants in Storm Water Discharges Associated With Industrial Activities in General

The volume and quality of storm water discharges associated with industrial activity will depend on a number of factors, including the industrial activities occurring at the facility, the nature of precipitation, and the degree of surface imperviousness. Rain water may pick up pollutants from structures and other surfaces as it drains from the land. In addition, sources of pollutants other than storm water, such as illicit connections[4], spills, and other improperly dumped materials may

[4] Illicit connections are point source discharges of pollutants that are not composed entirely of storm water, that are not covered by an existing NPDES permit, and which are discharged through separate storm sewers to waters of the United States.

increase the pollutant loads discharged from separate storm sewers. The sources which contribute pollutants to storm water discharges differ with the type of industry operation and facility-specific features. For example, air emissions may be a significant source of pollutants at some facilities, material storage operations may be important at different operations, while other facilities may discharge storm water associated with industrial activity with relatively low levels of pollutants.

The most extensively studied storm water discharges have been those from residential and commercial areas (urban runoff). Evaluating these discharges will provide a starting point for understanding the pollutants that can be expected in storm water discharges associated with industrial activity. Many storm water discharges are expected to contain the pollutants typically associated with urban runoff, along with additional pollutants that result from the specific industrial operations of the facility.

From 1978 through 1983, EPA provided funding and guidance to the Nationwide Urban Runoff Program (NURP) to study the nature of runoff from commercial and residential areas. The NURP program included 28 projects across the Nation, conducted separately at the local level but centrally reviewed, coordinated, and guided.

One focus of the NURP program was to characterize the water quality of discharges from separate storm sewers which drain residential, commercial, and light industrial (industrial parks) sites. The majority of samples collected in the NURP study were analyzed for seven conventional pollutants and three metals. The results of this study are presented in Table 2 for these 10 constituents and fecal coliform. Data collected in NURP indicated that on an annual loading basis, suspended solids in discharges from separate storm sewers draining runoff from residential, commercial and light industrial areas are around an order of magnitude greater than effluent from sewage treatment plants receiving secondary treatment. The study also indicated that annual loadings of chemical oxygen demand (COD) are comparable to effluent from sewage treatment plants receiving secondary treatment. When analyzing annual loadings associated with urban runoff, it is important to recognize that discharges of urban runoff are highly intermittent, and that the short-term loadings associated with individual events will be high and may have shock loading effects on receiving water such as sag in dissolved oxygen levels.

TABLE 2.—QUALITY CHARACTERISTICS OF RUNOFF FROM RESIDENTIAL AND COMMERCIAL AREAS

Constituent	Average residential or commercial site concentration	Weighted mean residential or commercial site concentration	Average recommendations for load estimates
TSS	239 mg/L	180 mg/L	180–548 mg/L
BOD	12 mg/L	12 mg/L	12–19 mg/L
COD	94 mg/L	82 mg/L	82–178 mg/L
Total Phosphorus	0.5 mg/L	0.42 mg/L	0.42–0.88 mg/L
Soluble Phosphorus	0.15 mg/L	0.15 mg/L	0.15–0.28 mg/L
Total Kjeldahl Nitrogen	2.3 mg/L	1.90 mg/L	1.90–4.18 mg/L
Nitrate-Nitrite	1.37 mg/L	0.86 mg/L	0.86–2.21 mg/L
Total Copper	53 µg/L	43 µg/L	43–118 µg/L
Total Lead	238 µg/L	182 µg/L	182–443 µg/L
Total Zinc	353 µg/L	202 µg/L	202–633 µg/L
Fecal Coliform.			
Warm Weather	50,240 counts/100 ml.	27,605 counts/100 ml.	
Cold Weather	22,918 counts/100 ml.	7,075 counts/100 ml.	

Source: Developed from "Results of the Nationwide Urban Runoff Program, Vol. 1—Final Report," EPA 1983.

The NURP program also involved monitoring 120 priority pollutants. Seventy-seven priority pollutants were detected in samples of storm water discharges from residential, commercial, and light industrial lands taken during the NURP study, including 14 inorganic and 63 organic pollutants. Table 3 shows the priority pollutants that were detected in at least ten percent of the discharge samples that were sampled for priority pollutants. The NURP data also showed a significant number of these samples exceeded various freshwater water quality criteria.

Although NURP did not evaluate oil and grease, other studies have demonstrated that urban runoff is an extremely significant source of oil pollution to receiving waters, with hydrocarbon levels in urban runoff typically being reported at a range of 2 mg/L to 10 mg/L. These hydrocarbons tend to accumulate in bottom sediments where they may persist for long periods of time, and exert adverse impacts on benthic organisms.

TABLE 3.—PRIORITY POLLUTANTS DETECTED IN AT LEAST 10 PERCENT OF NURP SAMPLES

	Frequency of detection
Metals and Inorganics:	
Antimony	13
Arsenic	52
Beryllium	12
Cadmium	48
Chromium	58
Copper	91
Cyanides	23
Lead	94

TABLE 3.—PRIORITY POLLUTANTS DETECTED IN AT LEAST 10 PERCENT OF NURP SAMPLES—Continued

	Frequency of detection
Nickel	43
Selenium	11
Zinc	94
Pesticides:	
Alpha-hexachlorocyclohexane	20
Alpha-endosulfan	10
Chlordane	17
Lindane	15
Halogenated Aliphatics:	
Methane, dichloro-	11
Phenols and Cresols:	
Phenol	14
Phenol, pentachloro-	19
Phenol, 4-nitro	10

TABLE 3.—PRIORITY POLLUTANTS DETECTED IN AT LEAST 10 PERCENT OF NURP SAMPLES—Continued

	Frequency of detection
Phthalate Esters:	
Phthalate, bis(2-ethylhexyl)	22
Polycyclic Aromatic Hydrocarbons:	
Chrysene	10
Fluoranthene	16
Phenanthrene	12
Pyrene	15

Other studies have shown that many storm sewers contain illicit discharges of non-storm water, and that large amounts of wastes are disposed improperly in storm sewers. Removal of these discharges present opportunities for dramatic improvements in the quality of storm water discharges. Storm water discharges from industrial facilities may contain, in addition to illicit connections and improperly disposed wastes, toxics and conventional pollutants when material management practices allow exposure to storm water.

In some municipalities, illicit connections of sanitary, commercial, and industrial discharges to storm sewer systems have had a significant impact on the water quality of receiving waters. Although the NURP study did not characterize illicit connections to storm sewers other than to ensure that monitoring sites used in the study were free from sanitary sewage contamination, the study concluded that illicit connections can result in high bacterial counts and dangers to public health.

Studies have shown that illicit connections to storm sewers can create severe, widespread contamination problems. For example, the Huron River Pollution Abatement Program inspected 660 businesses, homes, and other buildings located in Washtenaw County, Michigan. The program identified that 14 percent of the buildings had improper storm drain connections. Illicit discharges were detected at a higher rate of 60 percent for automobile-related businesses, including service stations, automobile dealerships, car washes, body shops, and light industrial facilities. While some of the problems discovered were due to improper plumbing or illegal connections, a majority were approved connections at the time they were built, but have since become unlawful discharges.

The NURP study and other studies of urban runoff provide insight on what can be considered background levels of pollutants for urban runoff, as these studies have focused primarily on monitoring runoff from residential, commercial, and light industrial areas. However, NURP concluded that the quality of urban runoff can be impacted adversely by several sources of pollutants that were not evaluated directly in the study and which are generally not reflected in the NURP data, such as illicit connections, construction site runoff, industrial site runoff and illegal dumping.

For some industrial facilities, the types and concentrations of pollutants in storm water discharges will be similar to the types and concentrations of pollutants generally found in storm water discharges from residential and commercial areas. However, storm water discharges from other industrial facilities will have a significant potential for higher pollutant levels. Under the regulations at 40 CFR 122.26(c)(2), facilities participating in the group application process were required to complete a two part application. The groups provided the following for Part 1: A list of participants by name, location, and precipitation zone; a summary of each participant's industrial activities; an explanation of why the participants are similar; a list of significant materials stored outside and materials management practices; and, a list of representative dischargers that will submit test data in Part 2. Part 2 requires quantitative testing data from the representative sampling facilities. All representative samplers analyzed their storm water discharges for the basic parameters including, BOD_5, COD, oil and grease, TKN, nitrite + nitrate as nitrogen, pH, and total phosphorus. In addition to these parameters, sampling facilities analyzed their discharges for any pollutant they believed to be present. Many groups were unable to complete the required sampling in time to meet the October 1, 1992, deadline for part 2 of the application. Most were, however, able to submit data for some of their designated sampling facilities prior to the deadline, and have completed their applications as expeditiously as practicable. EPA requests comment as to how the Agency might provide a credit in the permit requirements for facilities that were members of groups that submitted fully completed part 1 and part 2 applications.

EPA consolidated the groups into similar industrial sectors. The data received were categorized by sector and input into a computer database. The data were statistically analyzed and the mean, minimum, maximum, median, 95th percentile, and 99th percentile concentrations were calculated for each parameter on a sector by sector basis. Some of the statistical results are in Part VII. of this fact sheet. Overall, the data indicate a wide variation in the level of pollutants discharged from the facilities within each sector. However, in general, the data do show that there is a significant amount of conventional, toxic, and other pollutants being discharged into waters of the U.S. in storm water discharges associated with industrial activity. For a general discussion of pollutants found in the storm water discharges of facilities covered by today's permit, see the section of this fact sheet indicated in Table 1.

Six activities can be identified as major potential sources of pollutants in storm water discharges associated with industrial activity for the types of facilities covered by today's proposed permit: (1) Loading or unloading of dry bulk materials or liquids; (2) outdoor storage of raw materials or products; (3) outdoor process activities; (4) dust or particulate generating processes; (5) illicit connections or management practices; and (6) waste disposal practices. The potential for pollution from many of these activities may be influenced by the use and presence of toxic chemicals. These activities are discussed in more detail below.

1. Loading and Unloading Operations

Loading and unloading operations typically are performed along facility access roads, railways, and at loading/unloading docks and terminals. These operations include pumping of liquids or gases from truck or rail car to a storage facility or vice versa, pneumatic transfer of dry chemicals to or from the loading or unloading vehicle, transfer by mechanical conveyor systems, and transfer of bags, boxes, drums, or other containers from vehicle by forklift trucks or other materials handling equipment. Material spills or losses in areas can discharge directly to the storm drainage systems, or may accumulate in soils or on surfaces, and be washed away during a storm event or facility washdown.

2. Outdoor Storage

Outdoor storage activities include the storage of fuels, raw materials, by-products, intermediate products, final products, and process residuals. Materials may be stored in containers (e.g., drums or tanks), on platforms or pads, in bins, silos, boxes, or as piles. Materials, containers, and material storage areas that are exposed to rainfall and/or runoff can contribute pollutants to storm water when solid materials

wash off or materials dissolve into solution.

3. Other Outdoor Activities

Other outdoor activities include certain types of manufacturing and commercial operations and land-disturbing operations. Although many manufacturing activities are performed indoors, some activities, such as timber processing, rock crushing, and concrete mixing, typically occur outdoors. Processing operations can result in liquid spillage and losses of material solids to the drainage system or surrounding surfaces, or in the creation of dusts or aerosols, which can be deposited locally. Some outdoor industrial activities cause substantial physical disturbance of land surfaces that result in soil erosion by storm water. (Examples where disturbed land occurs include construction and mining.) Disturbed land can result in soil losses and other pollutant loadings associated with increased runoff rates. Facilities whose major process activities are conducted indoors may still apply chemicals such as herbicides, pesticides, and fertilizer outdoors for a variety of purposes.

4. Dust or Particulate Generating Processes

Dust or particulate generating processes include industrial activities with stack emissions or process dusts that settle on plant surfaces. Localized atmospheric deposition is a particular concern with heavy manufacturing industries. For example, monitoring of areas surrounding smelting industries has shown much higher levels of metals at sites nearest the smelter (Bearington 1977). Other industrial sites, such as mines, cement manufacturing, and refractories, will generate significant levels of dusts.

5. Illicit Connections

Illicit connections or inappropriate management practices result in improper non-storm water discharges to storm sewer systems. The likelihood of illicit discharges to storm water collection systems is expected to increase for older facilities as well as for those facilities that use high volumes of process water or that dispose of significant amounts of liquid wastes, including process waste waters, cooling waters, and rinse waters.

Sources of pollution from non-storm water discharges to separate storm sewer systems are typically a combination of improper connections, spills, improper dumping, and a belief that the absence of visible solids in a discharge is equivalent to the absence of pollution. Illicit connections between floor drains and separate storm sewers are a common source of non-storm water discharges. For example, rinse waters used in cleaning or cooling may be discharged to a floor drain that is connected to a separate storm sewer system. Significant amounts of rinse waters may originate from industries that use regular wash down procedures. Rinse waters may be used to cool materials by dipping, washing, or spraying objects with cool water. Rinse water is sometimes sprayed over the final products of metal plating facilities for cooling purposes. In addition, condensate return lines of heat exchangers often discharge to floor drains. Heat exchangers, particularly those used under stressed conditions such as in the metal finishing and electroplating industry, typically develop pin-hole leaks, which may result in contamination of condensate by process wastes. These and other non-storm water discharges to a storm sewer may be intentional, based on the belief that the discharge (condensate in the example previously discussed), does not contain pollutants, or it may be inadvertent, as the operator may be unaware that a floor drain is connected to the storm sewer.

6. Waste Management

Waste management practices include operating landfills, waste piles, and land application sites that involve land disposal. Outdoor waste treatment operations also include waste water and solid waste treatment and disposal processes, such as waste pumping, additions of treatment chemicals, mixing, aeration, clarification, and solids dewatering. Facilities often conduct some waste management onsite.

IV. Summary of Options for Controlling Pollutants

Options for controlling pollutants in storm water discharges associated with industrial activities will be discussed in terms of two major pollutant sources: (1) Materials discharged to waters of the U.S. via illicit connections; and (2) pollutants associated with storm water runoff.

A. Non-storm Water Discharges

As discussed earlier, in some cases, a substantial portion of the pollutant load from separate storm sewers is associated with non-storm water discharges. Non-storm water discharges through separate storm sewers include a wide variety of sources, including illicit connections, improper dumping, spills, or leakage from storage tanks and transfer areas. Measures to control spills and visible leakage must be incorporated into storm water pollution prevention plans (see below).

Operators of industrial facilities may be unaware of illicit discharges or leakage from underground storage tanks or other nonvisible systems to storm sewers. In many cases, non-storm water discharges to separate sewer systems have been occurring at facilities prior to their legal prohibition. In all cases, facilities are obligated to identify and prevent unauthorized non-storm discharges from entering separate storm sewer systems.

1. Methods to Identify Non-storm Water Discharges to Separate Storm Sewers

Several methods for identifying the presence of non-storm water discharges are discussed below[5]. A comprehensive evaluation of the storm sewers at a facility may incorporate several methods.

- *Schematics*—Where they exist, accurate piping schematics can be inspected as a first step in evaluating the integrity of the separate storm sewer system. The use of schematics is limited because schematics usually reflect the design of the piping system and may not reflect the actual configuration constructed. Schematics should be updated or corrected based on additional information found during inspections.
- *Evaluation of Drainage Map and Inspections*—Drainage maps should identify the key features of the drainage system: Each of the inlet and discharge structures, the drainage area of each inlet structure, and units such as storage or disposal units or material loading areas, which may be the source of an illicit discharge or improper dumping. In addition, floor drains and other water disposal inlets that are thought to be connected to the sanitary sewer can be identified. A site inspection can be used to augment and verify map development. These inspections, along with the use of the drainage map, can be coordinated with other best management practices discussed below.
- *End-of-Pipe Screening*—Discharge points or other access points such as manhole covers can be inspected for the presence of dry weather discharges and other signs of non-storm water discharges. Dry weather flows can be screened by a variety of methods. Inexpensive onsite tests include measuring pH; observing for oil sheens,

[5] A more complete discussion of methods to identify illicit connections can be found in the draft "Manual of Practice: Identification of Illicit Connections," EPA, Sept. 1990.

scums and discoloration of pipes and other structures; as well as colormetric detection tests for chlorine, detergents, metals and other parameters. In some cases, it may be appropriate to collect samples for more expensive analysis in a laboratory for fecal coliform, fecal streptococcus, conventional pollutants, volatile organic carbon, or other appropriate parameters.

• *Water Balance*—Many sewage treatment plants require that industrial dischargers measure the volume of effluent discharged to the sanitary sewer system. Similarly, the volume of water supplied to a facility is generally measured. A significantly higher volume of water supplied to the facility relative to that discharged to the sanitary sewer and other consumptive uses may be an indication of illicit connections. This method is limited by the accuracy of the flow meters used.

• *Dry Weather Testing*—Where storm sewers do not discharge during dry weather conditions, water can be introduced into floor drains, toilets and other points where non-storm water discharges are collected. Storm drain outlets are then observed for possible discharges.

• *Dye Testing*—Dry weather discharges from storm sewers can occur for a number of legitimate reasons, including ground water infiltration or the presence of a continuous discharge subject to an NPDES permit. Where storm sewers do have a discharge during dry weather conditions, dye testing for illicit connections can be used. Dye testing involves introducing fluorometric or other types of dyes into floor drains, toilets and other points where non-storm water discharges are collected. Storm drain outlets are then observed for possible discharges.

• *Manhole and Internal TV Inspection*—Physical inspection of manholes and internal inspection of storm sewers either physically or by television are used to identify potential entry points for illicit connections. Dry weather flows, material deposits, and stains are often indicators of illicit connections. TV inspections are relatively expensive and generally should be used only after a storm sewer has been identified as having illicit connections.

B. Options for Preventing Pollutants in Storm Water

The following five categories describe options for reducing pollutants in storm water discharges from industrial plants:

• Eliminating pollution sources.

• Implementing Best Management Practices to prevent pollution.

• Using traditional storm water management practices.

• Diverting storm water discharges to municipal sewage treatment plants.

• Providing end-of-pipe treatment.

A comprehensive storm water management program for a given plant may include controls from each of these categories. Development of comprehensive control strategies should be based on a consideration of plant characteristics.

1. Elimination of Pollution Sources

In some cases, the elimination of a pollution source may be the most cost-effective way to control pollutants in storm water discharges associated with industrial activity. Options for eliminating pollution sources include reducing onsite air emissions affecting runoff quality, changing chemicals used at the facility, and modification of material management practices such as moving storage or processing areas into buildings or under other cover.

2. Best Management Practices

The term best management practices (BMPs) can describe a wide range of management procedures, schedules of activities, prohibitions on practices, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include operating procedures, treatment requirements and practices to control plant site runoff, drainage from raw materials storage, spills or leaks. BMPs can be established in two ways: BMP plans and site or pollutant-specific BMPs.

a. BMP plans. EPA has worked with industry to identify the generic BMPs which most well-operated facilities use for pollution control, fire prevention, occupational safety and health, or product loss prevention. EPA often establishes NPDES permit conditions that require generic BMPs to be identified and implemented through BMP plans. Many of the BMPs in a typical BMP plan involve planning, reporting, training, preventive maintenance, and good housekeeping. Many industrial facilities currently employ BMPs as part of normal plant operation. For example, preventive maintenance and good housekeeping are routinely used in the chemical and related industries to reduce equipment downtime and to promote a safe work environment for employees. Good housekeeping BMPs generally are aimed at preventing spills and similar environmental incidents by stressing the importance of proper management and employee awareness. Experience has shown that many spills of hazardous chemicals can be attributed, in one way or another, to human error. Improper procedures, lack of training, and poor engineering are among the major causes of spills. Experience has shown that BMPs can be used appropriately and BMP plans can effectively reduce pollutant discharges in a cost-effective manner. BMP plans should reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans required under Section 311 of the CWA, and may incorporate any part of the SPCC plan into the BMP plan by reference. BMP plans should also ensure that solid and hazardous waste is managed in accordance with requirements established under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA should be expressly incorporated into the BMP plan.

In addition, each of the following nine specific requirements should be addressed in the BMP plan to reduce pollutants in runoff from the plant:

• Pollution Prevention Team.
• Material inventory.
• Material compatibility.
• Employee training.
• Visual Inspections.
• Preventive maintenance.
• Reporting and notification procedures.
• Sediment and erosion control.
• Spill Prevention and response.
• Good housekeeping.
• Facility security.

Additional technical information on BMPs and the elements of a storm water pollution prevention plan is contained in the publication entitled "Storm Water Management for Industrial Activities," EPA, September 1992. Contact the Storm Water Hotline (703) 821–4823 for information on how to obtain this document.

b. Site or pollutant-specific best management practices. In addition to the requirements of BMP plans discussed above, more advanced site or pollutant-specific BMP requirements may be developed. The following four categories describe these site or pollutant-specific BMPs:

• Prevention.
• Containment.
• Mitigation.
• Ultimate Disposition.

Table 4 lists BMPs associated with each category. Requirements for SPCC plans for oil pollution prevention (see 40 CFR part 112) illustrate how pollutant-specific BMPs can be implemented.

TABLE 4.—ADVANCED BMP ALTERNATIVES

Prevention	Containment	Mitigation		Waste disposal
		Cleanup	Treatment	
Monitoring	Secondary containment	Physical	Liquid-solids separation.	Landfill.
Nondestructive	Flow diversion to secondary containment.	Mechanical	Volatilization	Land treatment.
Labeling	Vapor control	Chemical	Coagulation/precipitation.	Reclamation.
Covering	Dust control		Neutralization	Discharge to surface water.
Pneumatic and vacuum conveying	Sealing		Ion exchange	Deep well injection.
Vehicle positioning			Chemical oxidation	Discharge to POTW.
Dry cleanup			Biological treatment	Offsite disposal.
			Thermal oxidation	

3. Traditional Storm Water Management Practices

In some situations, traditional storm water management practices such as grass swales, catch basin design and maintenance, infiltration devices, unlined retention or detention basins, water reuse, and oil and grit separators can be applied to an industrial setting. However, care must be taken to evaluate the potential of many of these traditional devices for ground water contamination. In some cases, it is appropriate to limit traditional storm water management practices to those areas of the drainage system that generate storm water discharges with relatively low levels of pollutants (e.g., many rooftops, parking lots, etc.). At facilities located in northern areas of the country, snow removal activities may play an important role in a storm water management program. In addition, other types of controls such as spill prevention measures can be considered to prevent catastrophic events that can lead to surface or ground water contamination.

4. Diversion of Discharge to Sewage Treatment Plant

Where storm water discharges contain significant amounts of pollutants that can be removed by a sewage treatment plant, the storm water discharge can be discharged to the sanitary sewage system. Such diversions must be coordinated with the operators of the sewage treatment plant and the collection system to avoid worsening problems with either combined sewer overflows (CSOs), basement flooding or wet weather operation of the treatment plant. Where CSO discharges, flooding or plant operation problems can result, onsite storage followed by a controlled release during dry weather conditions may be considered.

5. End-of-Pipe Treatment

End-of-pipe treatment requirements are typically imposed through numeric effluent limitations, which provide the discharger with flexibility to design the most cost effective type of treatment for the given facility.

At many types of industrial facilities, it may be appropriate to collect and treat the runoff from targeted areas of the facility. This approach was taken with 10 industrial categories with national effluent guideline limitations for storm water discharges. There are several basic similarities among the national effluent guideline limitations for storm water discharges:

- To meet the numeric effluent limitation, most, if not all, facilities must collect and temporarily store onsite runoff from targeted areas of the plant.
- The effluent guideline limitations do not apply to discharges whenever rainfall events, either chronic or catastrophic, cause an overflow of storage devices designed, constructed, and operated to contain a design storm. The 10-year, 24-hour storm, or the 25-year, 24-hour storm commonly are used as the design storm in the effluent guideline limitations.
- Most technology-based treatment standards are based on relatively simple technologies such as settling of solids, neutralization, and drum filtration. Potential ground water impacts should also be considered by operators when designing storage devices.

V. The Federal/Municipal Partnership: The Role of Municipal Operators of Large and Medium Municipal Separate Storm Sewer Systems

A key issue in developing a workable regulatory program for controlling pollutants in storm water discharges associated with industrial activity is the proper use and coordination of limited regulatory resources. This is especially important when addressing the appropriate role of municipal operators of large and medium municipal separate storm sewer systems in the control of pollutants in storm water associated with industrial activity which discharge through municipal separate storm sewer systems.

Several key policy factors arise when considering the appropriate strategy for regulating storm water discharges associated with industrial activity through municipal separate storm sewer systems. These factors include the following:

- The role and responsibilities of municipalities to control pollutants from nonmunicipal facilities which are discharged through a storm sewer owned or operated by the municipality.
- The large number of storm water discharges through municipal systems (the Agency anticipates that the majority of storm water discharges associated with industrial activity from many industrial classes discharge through municipal separate storm sewer systems).
- The ability of municipalities to recognize and represent local concerns and considerations.
- The ability of municipal operators to assist EPA and authorized NPDES States in identifying local priorities for controlling storm water discharges associated with industrial activity through specific municipal systems.
- The ability of municipal operators to assist EPA and authorized NPDES States to oversee effectively the development of appropriate site-specific controls for storm water discharges associated with industrial activity through municipal systems and to effectively require compliance with such controls.
- The authorities provided by the CWA (including those provided to the public) to review information developed

under the NPDES program and to enforce NPDES permits.

• The requirements of the CWA to develop and implement the NPDES permit program.

On November 16, 1990 (55 FR 47990), EPA promulgated a permitting scheme where controls for storm water discharges associated with industrial activity through large and medium municipal separate storm sewer systems may be addressed by two permits issued in a coordinated manner. This complementary permit approach envisions cooperative efforts by the permit issuing agency and municipal operators of large and medium municipal separate storm sewer systems to develop programs that will result in controls on pollutants in storm water discharges associated with industrial activity which discharge through municipal systems.

Under the complementary permit approach, storm water discharges associated with industrial activity which discharge through large and medium municipal separate storm sewer systems are required to obtain permit coverage. Permits for these discharges will establish requirements (such as controls or monitoring) for industrial operators of the discharge into the municipal system. In addition, these permits provide a basis for enforcement actions directly against the owner or operator of storm water discharges associated with industrial activity.

A second permit, issued to the operator of the large or medium municipal separate storm sewer, establishes the responsibilities of the municipal operators in controlling pollutants from storm water associated with industrial activity which discharges through their system. The framework for permits for discharges from large and medium municipal separate storm sewer systems has been developed to establish the responsibilities of the municipal operator to control pollutants discharged through these municipal systems. At the heart of the permit program for discharges from municipal separate storm sewer systems serving a population of 100,000 or more are requirements that municipal applicants develop and implement municipal storm water management programs. The municipal storm water management programs that will be incorporated into NPDES permits for discharges from municipal separate storm sewer systems will generally address (in addition to other possible requirements) the following three major components:

• Reducing pollutants in storm water discharges from municipal landfills; hazardous waste treatment, storage and disposal facilities; facilities subject to the Emergency Planning and Community Right-to-Know Act (EPCRA), section 313; and other priority industrial facilities through municipal separate storm sewers.

• Reducing pollutants in construction site runoff through municipal separate storm sewers.

• Identifying and controlling non-storm water discharges to municipal separate storm sewer systems.

These components of a municipal program can initiate the role of the municipality in assisting EPA and authorized NPDES States in implementing controls to reduce pollutants in storm water discharges associated with industrial activity which discharge through large and medium municipal separate storm sewer systems. Municipal programs to reduce pollutants in industrial site runoff and construction site runoff through municipal separate storm sewer systems specifically will address municipal responsibilities in controlling pollutants from industrial facilities. In addition, programs to identify and control non-storm water discharges to municipal separate storm sewer systems will in many cases focus on industrial areas because these areas often have a high potential for illicit connections, spills or improper dumping.

Consistent with the final permit application regulations published on November 16, 1990, (55 FR 47990), the proposed general permit accompanying this fact sheet have been developed to assist in establishing a cooperative approach between EPA and municipal operators of large and medium municipal separate storm sewer systems for controlling pollutants from storm water discharges associated with industrial activity which discharge through large and medium municipal separate storm sewer systems. These requirements will be coordinated with requirements in permits for discharges from large and medium municipal separate storm sewer systems. Major features of the proposed general permit that establish the framework for this cooperative approach include:

• Operators of storm water discharges associated with industrial activity which discharge through a large or medium municipal separate storm sewer system may be required to submit a copy of the notice of intent to the municipal operators of large or medium municipal system receiving the discharge.

• Requirements to monitor and reduce pollutants in discharges will be established for storm water discharges associated with industrial activity which discharge through large and medium municipal separate storm sewer systems (as well as other storm water discharges associated with industrial activity). Any records, reports, or information obtained by the Director as part of the permit implementation process, including site-specific storm water pollution prevention programs that are developed pursuant to the proposed general permit, are available to municipalities under section 308(b) of the CWA. This will assist municipalities in reviewing the adequacy of such requirements and developing priorities among industrial storm water sources.

• Industrial permittees with discharges through large and medium municipal systems may be required to submit discharge monitoring reports to municipal operators of these systems (as well as to the permitting issuing agency) or other monitoring results as required by the operator of the municipal separate storm sewer to assist the municipal operator in identifying priorities.

These permit conditions, along with appropriate conditions in permits for discharges from large and medium municipal separate storm sewer systems, will allow municipal operators of these systems to assist EPA in:

• Identifying priority storm water discharges associated with industrial activity to their system

• Reviewing and evaluating storm water pollution prevention plans

• Compliance efforts regarding storm water discharges associated with industrial activity to their municipal systems.

VI. Summary of Common Permit Conditions

The following section describes the permit conditions common to discharges from all the industrial activities covered by today's permit. These conditions reflect the baseline permit requirements established for most regulated industries in EPA's General Permits for Storm Water Discharges Associated with Industrial Activity (57 FR 41344–41356 September 9, 1992, and 57 FR 44438–44470 September 25, 1992). Permit requirements which vary from industry to industry are discussed in part VIII of this fact sheet.

A. Notification Requirement

General permits for storm water discharges associated with industrial

activity require the submittal of an NOI prior to the authorization of such discharges (see 40 CFR 122.28(b)(2)(i), April 2, 1992 (57 FR 11394)). Consistent with these regulatory requirements, today's proposed general permit establishes NOI requirements that operate in addition to the part 1 and part 2 group application requirements. To be covered under this permit, facilities, including members of an approved group, must submit an NOI within 90 days of the effective date of this permit. Dischargers submitting an NOI must use the form that will be provided in Addendum B of the final notice of this permit.

1. Contents of NOIs

- The type of permit under which the applicant wishes to be covered.
- The operator's name, address, telephone number, and status as Federal, State, private, public, or other entity.
- Street address of the facility for which the notification is submitted. Where a street address for the site is not available, the location can be described in terms of the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.
- An indication of whether the facility is located on Indian lands.
- Up to two 4-digit Standard Industrial Classification (SIC) codes that best represent the principal products or activities provided by the facility. For hazardous waste treatment, storage, or disposal facilities, land disposal facilities that receive or have received any industrial waste, steam electric power generating facilities, or treatment works treating domestic sewage, a 2-character code must provided.
- The permit number of any NPDES permit for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit.
- The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the receiving water(s) for the discharge through the municipal separate storm sewer.
- The monitoring status of the facility.
- For a co-permittee, if a storm water general permit number has been issued, it should be included.
- A certification that the operator of the facility has read and understands the eligibility requirements for the permit, and that the operator believes the facility to be in compliance with those requirements.
- For any facility that begins to discharge storm water associated with industrial activity after [insert date 270 days after permit finalization], a certification that a storm water pollution prevention plan has been prepared for the facility in accordance with part IV of this permit. (A copy of the plan should not be included with the NOI submission.) EPA requests comment as to whether submittal of this certification should be required for new facilities.

An NOI form will be provided in Addendum B of the final permit. The NOI must be signed in accordance with the signatory requirements of 40 CFR 122.22. A complete description of these signatory requirements will be provided in the instructions accompanying the NOI. Completed NOI forms must be submitted to the Director of the NPDES program in care of the address that will be provided in the Final Notice of the permit.

2. Deadlines

Except for the special circumstances discussed below, dischargers who intend to obtain coverage under the proposed permit for a storm water discharge from an industrial activity that is in existence prior to the date 90 days after permit issuance must submit an NOI on or before the date 90 days after permit issuance, and facilities that begin industrial activities after the date 90 days after permit issuance are required to submit an NOI at least 2 days prior to the commencement of the new industrial activity.

A discharger is not precluded from submitting an NOI at a later date. However, in such instances, EPA may bring appropriate enforcement actions.

The storm water regulations (40 CFR 122.27) require that facilities that discharge storm water associated with an industrial activity submit an application for permit coverage on or before October 1, 1992, except industrial activities owned or operated by a medium municipality, which had until May 17, 1993. Today's proposed permit does not extend that application deadline. EPA intends that most of the facilities that will seek coverage under the final version of today's proposed permit are: members of groups with approved applications; facilities that submitted a Notice of Intent to be covered by EPA's baseline general permit; or have submitted a complete individual application but have not yet received an individual permit.

EPA may deny coverage under this permit and require submittal of an individual NPDES permit application based on a review of the completeness and/or content of the NOI or other information (e.g., water quality information, compliance history, history of spills, etc.). Where EPA requires a discharger authorized under these industry general permits to apply for an individual NPDES permit or suggest an alternative general permit, EPA will notify the discharger in writing that a permit application is required. Coverage under these industry general permits will automatically terminate if the discharger fails to submit the required permit application in a timely manner. Where the discharger does submit a requested permit application, coverage under this general permit will automatically terminate on the effective date of the issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee.

3. Municipal Separate Storm Sewer System Operator Notification

Operators of storm water discharges associated with industrial activity that discharge through a large or medium municipal separate storm sewer system or a municipal system designated by the Director,[6] must notify the municipal operator of the system receiving the discharge and submit a copy of their NOI to the municipal operator.

4. Notice of Termination

Where a discharger is able to eliminate the storm water discharges associated with industrial activity from a facility, the discharger may submit a Notice of Termination (NOT) form (or photocopy thereof) provided by the Director.

A copy of the NOT and instructions for completing the NOT will be provided with the permit upon finalization. The NOT form requires the following information:

- Name, mailing address, and location of the facility for which the notification is submitted. Where a street address for the site is not available, the location of the approximate center of the site must be described in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter;
- The name, address and telephone number of the operator addressed by the Notice of Termination;

[6] The terms large and medium municipal separate storm sewer systems (systems serving a population of 100,000 or more) are defined at 40 CFR 122.26(b)(4) and (7). Some of the cities and counties in which these systems are found are listed in Appendices F, G, H, and I to 40 CFR part 122. Other municipal systems have been designated by EPA on a case-by-case basis.

- The NPDES permit number for the storm water discharge associated with industrial activity identified by the NOT;
- An indication of whether the storm water discharges associated with industrial activity have been eliminated or the operator of the discharges has changed; and
- The following certification:

I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have been eliminated or that I am no longer the operator of the industrial activity. I understand that by submitting this Notice of Termination I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by an NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

NOTs are to be sent to the Director of the NPDES program in care of the address to be provided in the Final Notice of the permit.

The NOT must be signed in accordance with the signatory requirements of 40 CFR 122.22. A complete description of these signatory requirements will be provided in the instructions accompanying the NOT.

B. Special Conditions

The conditions of this proposed permit have been designed to comply with the technology-based standards of the CWA (BAT/BCT). Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors and options discussed in this fact sheet for controlling pollutants in storm water discharges associated with industrial activity, the proposed general permit proposes a set of tailored requirements for developing and implementing storm water pollution prevention plans, and for selected discharges, effluent limitations.[7]

Parts IV. and VIII. of this fact sheet summarizes the options for controlling pollutants in storm water discharges associated with industrial activity. The proposed permit includes numeric effluent limitations for coal pile runoff, contaminated runoff from fertilizer manufacturing facilities, runoff from asphalt emulsion manufacturing facilities, and material storage pile runoff located at cement manufacturing facilities or cement kilns.

For other discharges covered by the permit, the proposed permit conditions reflect EPA's decision to select a number of best management practices and traditional storm water management practices which prevent pollution in storm water discharges as the BAT/BCT level of control for the majority of storm water discharges covered by this permit. The proposed permit conditions applicable to these discharges are not numeric effluent limitations, but rather are flexible requirements for developing and implementing site specific plans to minimize and control pollutants in storm water discharges associated with industrial activity. This approach is consistent with the approach used in the baseline general permits finalized on September 9, 1992 (57 FR 41236) and September 25, 1992 (57 FR 44438). In addition, today's proposed general permit reflects information received through the group application process.

EPA is authorized under 40 CFR 122.44(k)(2) to impose BMPs in lieu of numeric effluent limitations in NPDES permits when the Agency finds numeric effluent limitations to be infeasible. EPA may also impose BMPs which are "reasonably necessary * * * to carry out the purposes of the Act" under 40 CFR 122.44(k)(3). Both of these standards for imposing BMPs were recognized in *NRDC* v. *Costle*, 568 F.2d 1369, 1380 (D.C. Cir. 1977). The conditions in the proposed permit are proposed under the authority of both of these regulatory provisions. The pollution prevention or BMP requirements in this permit operate as limitations on effluent discharges that reflect the application of BAT/BCT. This is because the BMPs identified require the use of source control technologies which, in the context of these general permits, are the best available of the technologies economically achievable (or the equivalent BCT finding). See, e.g., *NRDC* v. *EPA*, 822 F.2d 104, 122–23 (D.C. Cir. 1987) (EPA has substantial discretion to impose nonquantitative permit requirements pursuant to section 402(a)(1)).

1. Prohibition of Non-storm Water Discharges.

Today's proposed general permit does not authorize non-storm water discharges that are mixed with storm water except as provided below. Non-storm water discharges that are intended to be authorized under today's proposed permit include discharges from fire fighting activities; fire hydrant flushings; potable water sources, including waterline flushings; irrigation drainage; lawn watering; routine external building washdown without detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents that are combined with storm water discharges associated with industrial activity.

To be authorized under the proposed general permit, these sources of non-storm water (except flows from fire fighting activities) must be identified in the storm water pollution prevention plan prepared for the facility. (Plans and other plan requirements are discussed in more detail below). Where such discharges occur, the plan must also identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge. For example, to reduce pollutants in irrigation drainage, a plan could identify low maintenance lawn areas that do not require the use of fertilizers or herbicides; for higher maintenance lawn areas, a plan could identify measures such as limiting fertilizer use based on seasonal and agronomic considerations, decreasing herbicide use with an integrated pest management program, introducing natural vegetation or more hardy species, and reducing water use (thereby reducing the volume of irrigation drainage).

Today's proposed permit does not require pollution prevention measures to be identified and implemented for non-storm water flows from fire-fighting activities because these flows will generally be unplanned emergency situations where it is necessary to take immediate action to protect the public.

The prohibition of unpermitted non-storm water discharges in this proposed permit ensures that non-storm water discharges (except for those classes of non-storm water discharges that are conditionally authorized in part III.A.2.b.) are not inadvertently authorized by this permit. Where a storm water discharge is mixed with non-storm water that is not authorized by today's proposed general permit or another NPDES permit, the discharger

[7] Part I.C.2 of the proposed general permit provide that facilities with storm water discharges associated with industrial activity which, based on an evaluation of site specific conditions, believe that the appropriate conditions of this permit do not adequately represent BAT and BCT requirements for the facility may request to be excluded from the coverage of the general permit by submitting to the Director an individual application (Form 1 and Form 2F) with a detailed explanation of the reasons supporting the request, including any supporting documentation showing that certain permit conditions are not appropriate.

should submit the appropriate application forms (Forms 1, 2C, and/or 2E) to gain permit coverage of the non-storm water portion of the discharge.

2. Releases of Reportable Quantities of Hazardous Substances and Oil

This proposed general permit provide that the discharge of hazardous substances or oil from a facility must be eliminated or minimized in accordance with the storm water pollution plan developed for the facility. Where a permitted storm water discharge contains a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under 40 CFR part 117, or 40 CFR Part 302 during a 24-hour period, the following actions must be taken:

- Any person in charge of the facility is required to notify the National Response Center (NRC) (800–424–8802; in the Washington, DC, metropolitan area, 202–426 2675) in accordance with the requirements of 40 CFR part 117, and 40 CFR part 302 as soon as they have knowledge of the discharge.
- The storm water pollution prevention plan for the facility must be modified within 14 calendar days of knowledge of the release to provide a description of the release, an account of the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and it must be modified where appropriate.
- The permittee must also submit to EPA within 14 calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken to modify the pollution prevention plan for the facility.

Anticipated discharges containing a hazardous substance in an amount equal to or in excess of reporting quantities are those caused by events occurring within the scope of the relevant operating system. Facilities that have more than 1 anticipated discharge per year containing a hazardous substance in an amount equal to or in excess of a reportable quantity are required to:

- Submit notifications for the first release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI); and
- Provide a written description in the storm water pollution prevention plan of the dates on which such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the release. In addition, the pollution prevention plan must address measures to minimize such releases.

Where a discharge of a hazardous substance or oil in excess of reporting quantities is caused by a non-storm water discharge (e.g., a spill of oil into a separate storm sewer), that discharge is not authorized by this permit and the discharger must report the discharge as required under 40 CFR part 110, 40 CFR part 117, or 40 CFR part 302. In the event of a spill, the requirements of Section 311 of the CWA and other applicable provisions of Sections 301 and 402 of the CWA continue to apply. This approach is consistent with the requirements for reporting releases of hazardous substances and oil that make a clear distinction between hazardous substances typically found in storm water discharges and those associated with spills that are not considered part of a normal storm water discharge (see 40 CFR 117.12(d)(2)(i)).

3. Co-located Industrial Facilities

Today's proposed general permit addresses storm water discharges from industrial activities co-located at an industrial facility described in the eligibility section of the permit. Co-located industrial activities are activities at an industrial facility that support the facility's primary industrial activity (e.g., a landfill at a wood treatment facility or a vehicle maintenance garage at a food manufacturer). Co-located industrial activities are authorized under today's proposed general permit provided that the industrial facility complies with the pollution prevention plan and monitoring requirements for each co-located activity as well as the pollution prevention plan and monitoring requirements for its primary industrial activity.

Authorizing co-located discharges allows industrial facilities to develop pollution prevention plans that full address all industrial activities at the site. For example, if a wood treatment facility has a landfill, the pollution prevention plan requirements for the wood treatment facility will differ greatly from those needed for a landfill. Therefore, by authorizing co-located industrial activities, the wood treatment facility will develop a pollution prevention plan to meet the requirements addressing the storm water discharges from the wood treatment facility and the landfill. The facility is also subject to monitoring requirements for both types of industrial activities as described in each applicable section of the permit. By monitoring the discharges from the different industrial activities, the facility can better determine the effectiveness of the pollution prevention plan requirements for controlling storm water discharges from all activities.

C. Common Pollution Prevention Plan Requirements

All facilities intended to be covered by today's proposed general permit for storm water discharges associated with industrial activity must prepare and implement a storm water pollution prevention plan. The storm water permit addresses pollution prevention plan requirements for a number of categories of industries. The following is a discussion of the baseline requirements for all industries; special requirements for storm water discharges associated with industrial activity through large and medium municipal separate storm sewer systems; special requirements for facilities subject to EPCRA Section 313 Reporting Requirements; and special requirements for facilities with outdoor salt storage piles. These are the permit requirements which apply to discharges associated with any of the industrial activities covered by today's permit. These common requirements may be amended or further clarified in the industry-specific pollution prevention plan requirements. Table 5 indicates the location of the industry-specific pollution prevention plans. These industry-specific requirements are additive for facilities where co-located industrial activities occur. For example, if a facility has both a sand and gravel mining operation and a ready mix concrete manufacturing operation, then that facility is subject to the pollution prevention plan requirements in both Part XI.E.3. and Part XI.J.3. of the proposed permit.

TABLE 5.—STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

Industrial activity	Fact sheet section describing PPP requirements	Permit section describing PPP requirements
Timber Products Facilities	VIII.A.7	XI.A.3
Paper and Allied Products Manufacturing Facilities	VIII.B.5	XI.B.3
Chemical and Allied Products Manufacturing Facilities	VIII.C.6	XI.C.4
Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers	VIII.D.4	XI.D.3
Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	VIII.E.5	XI.E.3
Primary Metals Facilities	VIII.F.6	XI.F.3
Metal Mining (Ore Mining and Dressing) Facilities	VIII.G.5	XI.G.3
Coal Mines and Coal Mining-Related Facilities	VIII.H.4	XI.H.3
Oil and Gas Extraction Facilities	VIII.I.5	XI.I.3
Mineral Mining and Processing Facilities	VIII.J.4	XI.J.3
Hazardous Waste Treatment, Storage, or Disposal Facilities	VIII.K.5	XI.K.3
Landfills and Land Application Sites	VIII.L.5	XI.L.3
Automobile Salvage Yards	VIII.M.5	XI.M.3
Scrap and Waste Material Processing and Recycling Facilities	VIII.N.5	XI.N.3
Steam Electric Power Generating Facilities, Including Coal Handling Areas	VIII.O.5	XI.O.3
Vehicle Maintenance or Equipment Cleaning Areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and the United States Postal Service Transportation Facilities.	VIII.P.5	XI.P.3
Vehicle Maintenance Areas and/or Equipment Cleaning Operations at Water Transportation Facilities	VIII.Q.5	XI.Q.3
Ship and Boat Building or Repairing Yards	VIII.R.6	XI.R.3
Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities.	VIII.S.4	XI.S.3
Treatment Works	VIII.T.5	XI.T.3
Food and Kindred Products Facilities	VIII.U.4	XI.U.3
Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities	VIII.V.5	XI.V.3
Wood and Metal Furniture and Fixture Manufacturing Facilities	VIII.W.4	XI.W.3
Printing and Publishing Facilities	VIII.X.5	XI.X.3
Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries	VIII.Y.4	XI.Y.3
Leather Tanning and Finishing Facilities	VIII.Z.5	XI.Z.3
Fabricated Metal Products Industry	VIII.AA.3	XI.AA.3
Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery	VIII.AB.5	XI.AB.3
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods.	VIII.AC.5	XI.AC.3

The pollution prevention approach in today's proposed general permit focuses on two major objectives: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from the facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from the facility and to ensure compliance with the terms and conditions of this permit.

The storm water pollution prevention plan requirements in the proposed general permit are intended to facilitate a process whereby the operator of the industrial facility thoroughly evaluates potential pollution sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff. The process involves the following four steps: (1) Formation of a team of qualified plant personnel who will be responsible for preparing the plan and assisting the plant manager in its implementation; (2) assessment of potential storm water pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent storm water contamination and comply with the terms and conditions of this permit.

EPA believes the pollution prevention approach is the most environmentally sound and cost-effective way to control the discharge of pollutants in storm water runoff from industrial facilities. This position is supported by the results of a comprehensive technical survey EPA completed in 1979.[8] The survey found that two classes of management practices are generally employed at industries to control the nonroutine discharge of pollutants from sources such as storm water runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup. Since publication of the 1979 survey, EPA has imposed management practices and controls in NPDES permits on a case-by-case basis. The Agency also has continued to review the appropriateness and effectiveness of such practices,[9] as well as the techniques used to prevent and contain

[8] See "Storm Water Management for Industrial Activities," EPA, September 1992, EPA–832–R–92–006.

[9] For example, see "Best Management Practices: Useful Tools for Cleaning Up," Thron, H., Rogoshewski, P., 1982, Proceedings of the 1982 Hazardous Material Spills Conference; "The Chemical Industries' Approach to Spill Prevention," Thompson, C., Goodier, J. 1980, Proceedings of the 1980 National Conference of Control of Hazardous Materials Spills; a series of EPA memorandum entitled "Best Management Practices in NPDES Permits—Information Memorandum," 1983, 1985, 1986, 1987, 1988; Review of Emergency Systems: Report to Congress," EPA, 1988; and "Analysis of Implementing Permitting Activities for Storm Water Discharges Associated with Industrial Activity," EPA, 1991.

oil spills.[10] Experience with these practices and controls has shown that they can be used in permits to reduce pollutants in storm water discharges in a cost-effective manner. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," September 1992, to assist permittees in developing and implementing pollution prevention measures.

1. Pollution Prevention Team

As a first step in the process of developing and implementing a storm water pollution prevention plan, permittees would be required to identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited storm water pollution potential).

2. Description of Potential Pollution Sources

Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to storm water runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or storm water drainage systems that drain the facility. This assessment of storm water pollution risk will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. The permit proposes that plans must describe the following elements:

a. Drainage. The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in runoff,[11] surface water bodies (including wetlands), places where significant materials[12] are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal. For areas of the facility that generate storm water discharges with a reasonable potential to contain significant amounts of pollutants, the map must indicate the probable direction of storm water flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion also must be identified.

EPA requests comment on whether the permit should require that the site map indicate the outfall locations, sampling locations, and types of discharges contained in the outfalls (e.g., storm water and air conditioner condensate).

b. Inventory of exposed materials. Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the effective date of the permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in runoff; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

c. Significant spills and leaks. The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

The listing should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar such spills or leaks in the future. This effort will aid the facility operator as she or he examines existing spill prevention and response procedures and develops any additional procedures necessary to fulfill the requirements of Part XI. of this permit.

d. Non-storm water discharges. Each pollution prevention plan must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water discharges. The certification must describe possible significant sources of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Acceptable test or evaluation techniques include dye tests, television surveillance, observation of outfalls or other appropriate locations during dry weather, water balance calculations, and analysis of piping and drainage schematics.[13]

[10] See for example, "The Oil Spill Prevention, Control and Countermeasures Program Task Force Report," EPA, 1988; and "Guidance Manual for the Development of an Accidental Spill Prevention Program," prepared by SAIC for EPA, 1986.

[11] Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

[12] Significant materials include, but are not limited to the following: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials, such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products, such as ashes, slag, and sludge that have the potential to be released with storm water discharges. (See 40 CFR 122.26(b)(8)).

[13] In general, smoke tests should not be used for evaluating the discharge of non-storm water to a separate storm sewer as many sources of non-storm water typically pass through a trap that would limit the effectiveness of the smoke test.

Except for flows that originate from fire fighting activities, sources of non-storm water that are specifically identified in the permit as being eligible for authorization under the general permit must be identified in the plan. Pollution prevention plans must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water discharge.

EPA recognizes that certification may not be feasible where facility personnel do not have access to an outfall, manhole, or other point of access to the conduit that ultimately receives the discharge. In such cases, the plan must describe why certification was not feasible. Permittees who are not able to certify that discharges have been tested or evaluated must notify the Director in accordance with Part XI. of the permit.

EPA requests comment as to whether the permit should require facilities to prepare an inventory of outfalls that indicates the types of non-storm water discharges contained in the outfall (e.g., process wastewater, air conditioner condensate, boiler blowdown, etc.) and the numbers of the NPDES permits to which the outfall is subject.

e. Sampling data. Any existing data on the quality or quantity of storm water discharges from the facility must be described in the plan, including data collected for part 2 of the group application process. These data may be useful for locating areas that have contributed pollutants to storm water. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

f. Summary of potential pollutant sources. The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., biochemical oxygen demand, suspended solids, etc.) associated with each source.

3. Measures and Controls

Following completion of the source identification and assessment phase, the permit proposes that the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

EPA emphasizes the implementation of pollution prevention measures and BMPs that reduce possible pollutant discharges at the source. Source reduction measures include, among others, preventive maintenance, chemical substitution, spill prevention, good housekeeping, training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutant discharges, EPA supports the use of source control measures and BMPs such as material segregation or covering, water diversion, and dust control. Like source reduction measures, source control measures and BMPs are intended to keep pollutants out of storm water. The remaining classes of BMPs, which involve recycling or treatment of storm water, allow the reuse of storm water or attempt to lower pollutant concentrations prior to discharge.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address one or more of the potential pollution sources identified in the plan. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems. The permit proposes that the portion of the plan that describes the measures and controls must address the following minimum components.

a. Good housekeeping. Good housekeeping involves using common sense to identify ways to maintain a clean and orderly facility and keep contaminants out of separate storm sewers. It includes establishing protocols to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. These protocols must be described in the plan and communicated to appropriate plant personnel.

b. Preventive maintenance. Permittees must develop a preventive maintenance program that involves regular inspection and maintenance of storm water management devices and other equipment and systems. The program description should identify the devices, equipment, and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair, or replacement of devices, equipment, and systems. For storm water management devices such as catch basins and oil/water separators, the preventive maintenance program should provide for periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and systems, the program should reveal and enable the correction of conditions that could cause breakdowns or failures that may result in the release of pollutants.

c. Spill prevention and response procedures. Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and in the event of a spill enable proper and timely response. Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be described in the plan. For a spill prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.

d. Inspections. In addition to or as part of the comprehensive site evaluation, qualified facility personnel must be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained.

e. Employee training. The pollution prevention plan must describe a program for informing personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. The training program should address topics

such as good housekeeping, materials management, and spill response procedures. A schedule for conducting training must be provided in the plan. Where appropriate, contractor personnel also must be trained in relevant aspects of storm water pollution prevention. Several sections in Part XI. of today's permit specify a minimum frequency for training. Others indicate that training is to be conducted at an appropriate interval. EPA requests comment as to whether a minimum training frequency of once per year should be specified for all industry sectors.

f. Recordkeeping and internal reporting procedures. The pollution prevention plan must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. At a minimum, records must address spills, monitoring, and inspection and maintenance activities. The plan also must describe a system that enables timely reporting of storm water management-related information to appropriate plant personnel.

g. Sediment and erosion control. The pollution prevention plan must identify areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. The plan must identify measures that will be implemented to limit erosion in these areas.

h. Management of runoff. The plan must contain a narrative evaluation of the appropriateness of traditional storm water management practices (i.e., practices other than those that control pollutant sources) that divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce the discharge of pollutants. Appropriate measures may include, among others, vegetative swales, collection and reuse of storm water, inlet controls, snow management, infiltration devices, and wet detention/retention basins.

Based on the results of the evaluation, the plan must identify practices that the permittee determines are reasonable and appropriate for the facility. The plan also should describe the particular pollutant source area or activity to be controlled by each storm water management practice. Reasonable and appropriate practices must be implemented and maintained according to the provisions prescribed in the plan.

In selecting storm water management measures, it is important to consider the potential effects of each method on other water resources, such as ground water. Although storm water pollution prevention plans primarily focus on storm water management, facilities must also consider potential ground water pollution problems and take appropriate steps to avoid adversely impacting ground water quality. For example, if the water table is unusually high in an area, an infiltration pond may contaminate a ground water source unless special preventive measures are taken. Under EPA's July 1991 Ground Water Protection Strategy, States are encouraged to develop Comprehensive State Ground Water Protection Programs (CSGWPP). Efforts to control storm water should be compatible with State ground water objectives as reflected in CSGWPPs.

4. Comprehensive Site Compliance Evaluation

The permit proposes that storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of the permit. The plan must indicate the frequency of such evaluations which in most cases must be at least once a year.[14] The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Material handling and storage areas and other potential sources of pollution must be visually inspected for evidence of actual or potential pollutant discharges to the drainage system. Inspectors also must observe erosion controls and structural storm water management devices to ensure that each is operating correctly. Equipment needed to implement the pollution prevention plan, such as that used during spill response activities, must be inspected to confirm that it is in proper working order.

The results of each site inspection must be documented in a report signed by an authorized company official. The report must describe the scope of the inspection, the personnel making the inspection, the date(s) of the inspection, and any major observations relating to implementation of the storm water pollution prevention plan. Inspection reports must be retained for at least 3 years after the date that the permit expires. Based on the results of each inspection, the description in the plan of potential pollution sources and measures and controls must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

D. Special Requirements

1. Special Requirements for Storm Water Discharges Associated With Industrial Activity Through Large and Medium Municipal Separate Storm Sewer Systems

Permittees that discharge storm water associated with industrial activity through large or medium municipal separate storm sewer systems[15] are required to submit notification of the discharge to the operator of the municipal separate storm sewer system. A list of these systems is provided in Addendum D of the permit.

Facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions. In addition, permittees that discharge storm water associated with industrial activity through a large or medium municipal separate storm sewer system must make their pollution prevention plans available to the municipal operator of the system upon request by the municipal operator.

2. Special Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Requirements

Today's permit proposes special requirements for certain permittees subject to reporting requirements under Section 313 of the EPCRA (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA)). EPCRA Section 313 requires operators of certain facilities that manufacture (including import), process, or otherwise use listed toxic chemicals to report annually their releases of those chemicals to any

[14] Where annual site inspections are shown in the plan to be impractical for inactive mining sites, due to remote location and inaccessibility, site inspections must be conducted at least once every 3 years. However, at least one inspection must take place before October 1, 1994. For mining sites that become inactive after October 1, 1994, the first site inspection must take place on the date 2 years after such a site becomes inactive.

[15] Large and medium municipal separate storm sewer systems are systems located in an incorporated city with a population of 100,000 or more, or in a county identified as having a large or medium system (see 40 CFR 122.26(b) (4) and (7) and Appendices F through I to Part 122). A list of these municipalities is provided in Addendum D to the permit.

environmental media. Listed toxic chemicals include more than 300 chemicals listed at 40 CFR part 372.

The criteria for facilities that must report under Section 313 are given at 40 CFR 372.22. A facility is subject to the annual reporting provisions of Section 313 if it meets all three of the following criteria for a calendar year:

- It is included in SIC codes 20 through 39;
- It has 10 or more full-time employees; and
- It manufactures (including imports), processes, or otherwise uses a chemical listed in 40 CFR 372.65 in amounts greater than the "threshold" quantities specified in 40 CFR 372.25.

There are more than 300 individually listed Section 313 chemicals, as well as 20 categories of Toxic Release Inventory (TRI) chemicals for which reporting is required. EPA has the authority to add to and delete from this list. The Agency has identified approximately 175 chemicals that it is classifying for the purposes of this general permit as "Section 313 water priority chemicals." For the purposes of this proposed permit, Section 313 water priority chemicals are defined as chemicals or chemical categories that (1) are listed at 40 CFR 372.65 pursuant to EPCRA Section 313; (2) are manufactured, processed, or otherwise used at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and (3) meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic toxicity criteria. A list of the water priority chemicals is provided in Addendum F to the permit.

EPA requests comment as to whether it would be appropriate to extend these special requirements to all facilities that store liquid chemicals in above-ground tanks, or handle liquid chemicals in areas exposed to precipitation.

a. Summary of special requirements. The special requirements in today's permit for facilities subject to reporting requirements under EPCRA Section 313 for a water priority chemical state that storm water pollution prevention plans, in addition to the baseline requirements for plans, must contain special provisions addressing areas where Section 313 water priority chemicals are stored, processed, or otherwise handled. These requirements reflect the Best Available Technology for controlling discharges of water priority chemicals in storm water. The permit provides that appropriate containment, drainage control, and/or diversionary structures must be provided for such areas. At a minimum, one of the following preventive systems or its equivalent must be used:

- Curbing, culverting, gutters, sewers, or other forms of drainage control to prevent or minimize the potential for storm water runon to come into contact with significant sources of pollutants; or
- Roofs, covers, or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.

In addition, the permit establishes requirements for priority areas of the facility. Priority areas of the facility include the following:

- Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals;
- Material storage areas for Section 313 water priority chemicals other than liquids;
- Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals; and
- Areas where Section 313 water priority chemicals are transferred, processed, or otherwise handled.

The permit provides that site runoff from other industrial areas of the facility that may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals must incorporate the necessary drainage or other control features to prevent the discharge of spilled or improperly disposed material and to ensure the mitigation of pollutants in runoff or leachate. The permit also establishes special requirements for preventive maintenance and good housekeeping, facility security, and employee training.

Storm water pollution prevention plans for facilities subject to these special requirements must be reviewed and certified by a Registered Professional Engineer (PE). The PE must be able to certify that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. The PE must personally examine the facility and be familiar with the requirements of today's permit before making a certification. The permit requires that a certification be made every 3 years. Where significant modifications are made to the facility, such as the addition of material handling areas or chemical storage units, permittees are required to obtain an additional PE certification as soon as practicable. The certifications do not relieve the discharger of the duty to prepare and implement fully a storm water pollution prevention plan that is in accordance with the permit. EPA requests comment on whether individuals other than Professional Engineers should be allowed to certify storm water pollution prevention plans; for example, individuals who have completed approved courses in storm water pollution prevention.

b. Requirements for priority areas. The permit provides that drainage from priority areas should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these must be manually activated. Flapper-type drain valves must not be used to drain containment areas, as these will not effectively control spills. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design. If facility drainage does not meet these requirements, the final discharge conveyance of all in-facility storm sewers must be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material or contaminated storm water to the facility. Records must be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

Additional special requirements are related to the types of industrial activities that occur within the priority area. These requirements are summarized below:

- *Liquid Storage Areas*—Where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals, the material and construction of tanks or containers used for the storage of a Section 313 water priority chemical must be compatible with the material stored and conditions of storage, such as pressure and temperature. Liquid storage areas for Section 313 water priority chemicals must be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent

measures. A strong spill contingency plan would typically contain, at a minimum, a description of response plans, personnel needs, and methods of mechanical containment (such as use of sorbents, booms, collection devices, etc.), steps to take for removal of spill chemicals or materials, and procedures to ensure access to and availability of sorbents and other equipment. The testing component of the plan would provide for conducting integrity testing of storage tanks at set intervals such as once every 5 years, and conducting integrity and leak testing of valves and piping at a minimum frequency, such as once per year. In addition, a strong plan would include a written and actual commitment of manpower, equipment and materials required to comply with the permit and to expeditiously control and remove any quantity of spilled or leaked chemicals that may result in a toxic discharge.

• *Other Material Storage Areas*—Material storage areas for Section 313 water priority chemicals other than liquids that are subject to runoff, leaching, or wind must incorporate drainage or other control features to minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

• *Truck and Rail Car Loading and Unloading Areas*—Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals must be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels, and filler nozzles) when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

• *Other Transfer, Process, or Handling Areas*—Processing equipment and materials handling equipment must be operated to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment must be compatible with the substances handled. Drainage from process and materials handling areas must minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents to prevent a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at truck loading/unloading docks must be provided as appropriate. Visual inspections or leak tests must be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

3. Special Requirements for Storm Water Discharges Associated with Industrial Activity from Salt Storage Facilities

Today's general permit contains special requirements for storm water discharges associated with industrial activity from salt storage facilities. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. This requirement only applies to runoff from storage piles discharged to waters of the United States. Facilities that collect all of the runoff from their salt piles and reuse it in their processes or discharge it subject to a separate NPDES permit do not need to enclose or cover their piles. Permittees must comply with this requirement as expeditiously as practicable, but in no event later than 3 years from the date of permit issuance.

4. Consistency With Other Plans

Storm water pollution prevention plans may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

E. Monitoring and Reporting Requirements

1. Overview of Multi-sector Permit Monitoring Conditions

Today's permit proposes analytical discharge monitoring requirements for discharges from certain classes of industrial facilities. EPA believes that industries may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan, the proposed permit requires certain industries to collect and analyze samples of their storm water discharges for the pollutants. Industries not subject to analytical monitoring requirements under today's proposed permit will be required to perform quarterly visual examinations of storm water discharges unless the Director provides written notice that analytical monitoring is necessary. EPA believes these visual inspections will assist with the evaluation of the pollution prevention plan. This section provides a general description of the monitoring and reporting requirements under today's proposed permit. Table 6 lists the sections in today's fact sheet and permit where industry-specific monitoring and reporting requirements may be found.

TABLE 6.—STORM WATER MONITORING REQUIREMENTS

Industrial activity	Section of fact sheet describing monitoring requirements	Permit section describing monitoring requirements
Timber Products Facilities	VIII.A.8	XI.A.5
Paper and Allied Products Manufacturing Facilities	VIII.B.7	XI.B.5
Chemical and Allied Products Manufacturing Facilities	VIII.C.8	XI.C.5
Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers	VIII.D.5	XI.D.5
Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	VIII.E.7	XI.E.5
Primary Metals Facilities	VIII.F.7	XI.F.5
Metal Mining (Ore Mining and Dressing) Facilities	VIII.G.8	XI.G.5
Coal Mines and Coal Mining-Related Facilities	VIII.H.6	XI.H.5
Oil and Gas Extraction Facilities	VIII.I.7	XI.I.5
Mineral Mining and Processing Facilities	VIII.J.6	XI.J.5

TABLE 6.—STORM WATER MONITORING REQUIREMENTS—Continued

Industrial activity	Section of fact sheet describing monitoring requirements	Permit section describing monitoring requirements
Hazardous Waste Treatment, Storage, or Disposal Facilities	VIII.K.7	XI.K.5
Landfills and Land Application Sites	VIII.L.6	XI.L.5
Automobile Salvage Yards	VIII.M.6	XI.M.5
Scrap and Waste Material Processing and Recycling Facilities	VIII.N.6	XI.N.5
Steam Electric Power Generating Facilities, Including Coal Handling Areas	VIII.O.6	XI.O.5
Vehicle Maintenance or Equipment Cleaning Areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and the United States Postal Service Transportation Facilities.	VIII.P.6	XI.P.5
Vehicle Maintenance Areas and/or Equipment Cleaning Operations at Water Transportation Facilities	VIII.Q.6	XI.Q.5
Ship and Boat Building or Repairing Yards	VIII.R.6	XI.R.5
Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities.	VIII.S.6	XI.S.5
Treatment Works	VIII.T.6	XI.T.5
Food and Kindred Products Facilities	VIII.U.5	XI.U.5
Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities	VIII.V.6	XI.V.5
Wood and Metal Furniture and Fixture Manufacturing Facilities	VIII.W.5	XI.W.5
Printing and Publishing Facilities	VIII.X.7	XI.X.5
Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries	VIII.Y.7	XI.Y.5
Leather Tanning and Finishing Facilities	VIII.Z.7	XI.Z.5
Fabricated Metal Products Industry	VIII.AA.7	XI.AA.5
Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery	VIII.AB.7	XI.AB.5
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods.	VIII.AC.7	XI.AC.5

After Part 2 monitoring data were entered, EPA conducted statistical analyses of the group Part 2 data for each parameter within every industrial sector. Each pollutant with three or more observations, within an industrial sector, was identified as a pollutant of potential concern. For each pollutant of concern, EPA established bench mark values to which the pollutant statistics would be compared for each industrial sector. The primary source of the bench mark values are NURP (National Urban Runoff Program) median values for Form 2–F, Part VII, Part A pollutant parameters and Gold Book Values for Form 2–F, Section VII, Parts B and C pollutant parameters. The pollutants, bench mark values, and source of the bench mark values are indicated below in Table 7. EPA requests comments on the bench mark levels and the sources used to determine the bench mark values.

TABLE 7.—POLLUTANT BENCH MARK VALUES

Pollutant name	Bench mark level	Source
Biological Oxygen Demand(5)	9 mg/L	7
Chemical Oxygen Demand	65 mg/L	7
Total Suspended Solids	100 mg/L	7
Total Kjeldahl Nitrogen	105 mg/L	7
Nitrate+Nitrite Nitrogen	0.68 mg/L	7
Total Phosphorus	0.33 mg/L	7
pH	6.5–9 s.u.	8
1,1,1-Trichloroethane	3.1 mg/L	3
Acrylonitrile (c)	7.55 mg/L	2
Aluminum, Total (pH 6.5–9)	0.75 mg/L	1
Ammonia (as Nitrogen, un-ionized)	19 mg/L	1
Antimony, Total	0.088 mg/L	1
Arsenic, Total (c)	0.000018 mg/L	3
Barium, Total	1.0 mg/L	4
Benzene (c,s)	5.3 mg/L	2
Beryllium, Total (c)	0.13 mg/L	2
Butylbenzyl Phthalate	3 mg/L	3
Cadmium, Total (H)	0.0018 mg/L	1
Chloride	860 mg/L	1
Copper, Total (H)	0.009 mg/L	1
Dimethyl Phthalate	313 mg/L	3
Ethylbenzene	32 mg/L	2
Fluoranthene	3.98 mg/L	2
Iron, Total	0.3 mg/L	3
Lead, Total (H)	0.0337 mg/L	1
Manganese	0.05 mg/L	3
Mercury, Total	0.0024 mg/L	1
Methylene Chloride	0.0047 mg/L	3
Naphthalene	2.3 mg/L	2

TABLE 7.—POLLUTANT BENCH MARK VALUES—Continued

Pollutant name	Bench mark level	Source
Nickel, Total (H)	0.7884 mg/L	1
PCB–1016 (c)	0.00000044 mg/L	3
PCB–1221 (c)	0.00000044 mg/L	3
PCB–1232 (c)	0.00000044 mg/L	3
PCB–1242 (c)	0.00000044 mg/L	3
PCB–1248 (c)	0.00000044 mg/L	3
PCB–1254 (c)	0.00000044 mg/L	3
PCB–1260 (c)	0.00000044 mg/L	3
Phenanthrene (PAH,c)	0.03 mg/L	1
Phenols, Total	10.2 mg/L	2
Pyrene (PAH,c)	0.0000028 mg/L	3
Selenium, Total	0.02 mg/L	1
Silver, Total (H)	0.0009 mg/L	1
Toluene	17.5 mg/L	2
Trichloroethylene (c)	45 mg/L	2
Zinc, Total (H)	0.065 mg/L	1

Sources:
1. "EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
2. "EPA Recommended Ambient Water Quality Criteria." LOEL Acute Freshwater
3. "EPA Recommended Ambient Water Quality Criteria." Human Health Criteria for Consumption of Water and Organisms
4. "EPA Recommended Ambient Water Quality Criteria." Human Health Criteria for Consumption of Organisms Only
5. "EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Marine
6. "EPA Recommended Ambient Water Quality Criteria." LOEL Acute Marine
7. NURP
8. "EPA Recommended Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater NA. Bench mark value was not available.

Notes:
(c) carcinogen
(H) hardness dependent
(PAH) Polynuclear Aromatic Hydrocarbon
(s) Displayed standard is for Total Aromatic Hydrocarbons, which supersedes the criteria for Benzene.
(y) Storm water effluent limitations guidelines are not appropriate.

Assumptions:
Receiving water temperature—20 C
Receiving water pH—7
Receiving water hardness mg/L $CaCO_3$—50
Receiving water salinity g/kg—20
Acute to Chronic Ratio (ACR)—10

In determining industry-specific monitor requirements, EPA conducted statistical analyses for all pollutants submitted by facilities within an industrial sector. For each pollutant with three or more observations, EPA compared the industry's median values with the bench mark values indicated in Table 7. Comparisons were not conducted for pollutants with two or less observations within a sector. Median values were used for comparison purposes because the median indicates the 50th percentile of all the observations submitted for a particular pollutant. EPA did not select the mean, or average, industrial value for comparison purposes because this value is more susceptible to outliers.

Almost all industry sectors had at least one pollutant with a median concentration higher than the benchmark level. However, EPA believes that analytical monitoring requirements on all industrial activities may be excessive. Therefore, EPA proposes to require monitoring only for "priority" industrial activities. EPA has selected five pollutants with median concentrations above benchmark levels as one criterion for selection as a priority sector. Therefore, if the sector had median values greater than bench mark values for five, or more, parameters the industry was identified for analytical monitoring. If the sector had median values greater than bench mark values for four, or less, parameters the industry would only need to conduct visual inspections of storm water discharges. There was no consideration of type of parameter (toxic, carcinogenic, or conventional) when identifying the industries that would be required to sample their storm water discharges. All pollutants bore equal weight. EPA requests comments for selecting five pollutants greater than bench mark values as the determination for whether or not all facilities within an industry would be required to conduct storm water discharge monitoring.

Discharges from the following industries were identified as requiring analytical monitoring as a result of the prioritization analysis: Facilities engaged in wood preserving or wood surface treatment, chemical and allied products manufacturing facilities, concrete and clay products manufacturing facilities, primary metals facilities, ore mining and dressing facilities, landfills and land application sites, scrap and waste material processing and recycling facilities, steam electric generating facilities, ship and boat building and repair yards, waste water treatment works, food and kindred products facilities, leather tanning and finishing facilities, and fabricated metal products facilities.

In addition to the facilities listed above, EPA determined, based upon a review of the degree of exposure, types of materials exposed, and in some cases inadequate sampling data in the group applications, that the following industries' storm water discharges also warranted prioritization for monitoring: hazardous waste treatment storage and disposal facilities, water transportation facilities, automobile salvage yards, and airports which use more than 100,000 gallons per year of ethylene glycol or 25 tons of urea for deicing. EPA requests comment upon the inclusion of these industries in the priority list for analytical monitoring requirements.

All facilities within an industry identified for analytical monitoring must, at a minimum, monitor their storm water discharges during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter for which the facility is required to monitor. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed. Monitoring must be conducted for the same storm water discharge outfall in each sampling period. Where a given storm water discharge is addressed by more than one class of monitoring requirements, then the monitoring requirements for the applicable classes of activities are cumulative. Therefore, if a particular discharge fits under more than one set of monitoring requirements, the facility must comply with both sets of sampling requirements. Monitoring requirements must be evaluated on an outfall-by-outfall basis.

If the average concentration for a parameter is less than or equal to the bench mark value, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the bench mark value, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

Several sections of today's proposed permit require monitoring for total recoverable metals. The toxicity of metals is affected in part by pH. However, not all sectors require monitoring for pH. EPA requests comment as to whether it would be appropriate to add pH to the list of parameters for all sectors where monitoring of a total recoverable metal is required.

2. Compliance Monitoring

In addition to the analytical monitoring proposed for the high-priority industries, today's permit contains monitoring requirements for discharges which are subject to effluent limitation guidelines. These discharges must be sampled annually and tested for the parameters which are limited by the permit. Discharges subject to compliance monitoring include: coal pile runoff, contaminated runoff from phosphate fertilizer manufacturing facilities, runoff from asphalt paving and roofing emulsion production areas, and material storage pile runoff from cement manufacturing facilities. EPA request comment upon the adequacy of the proposed annual sampling requirements to ensure compliance with the numeric effluent limitations.

3. Alternate Certification

Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities which do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements provided the discharger makes a certification for a given outfall, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Discharges subject to numeric effluent limitations are not eligible for the alternative certification. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA prior to the sampling periods. EPA requests comment on whether a facility that fails to have an average concentration below benchmark value in year 2 should be allowed to exercise the Alternative Certification provision in year 4.

4. Reporting and Retention Requirements

Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within three months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

The permittee must include a measurement or estimate of the total rainfall, volume of runoff, and peak flow rate of runoff for the storm event sampled. Facilities subject to the requirements of Part XI.C. (Chemical and Allied Products) of today's permit must install a rain gauge at their facility for the purpose of ensuring an accurate estimate. EPA requests comment as to whether all facilities subject to monitoring requirements should be required to install a rain gauge.

The location for submittal of all reports is contained in the permit. Consistent with Office of Management and Budget Circular A–105, facilities located on certain Indian Lands in Arizona, Utah, New Mexico, Idaho, Nevada, and Colorado should note that permitting authority has been consolidated in one EPA Region where a reservation crosses the boundaries between the Regions. For example, all NPDES permitting for Navajo lands is handled by EPA Region IX. The proposed permit requires dischargers that must submit monitoring information annually to provide copies to receiving large or medium municipal separate storm sewer systems and States that have requested this information.

The proposed permit requires retention of monitoring records for 6 years, since not all facilities that monitor will be required to submit the results annually. In addition, pollution prevention plans must be kept for the life of the permit.

5. Sample Type

Grab samples may be used for all monitoring. Unless otherwise stated, all such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample must be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger must submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. A minimum of one grab is required. Where the discharge to be sampled contains both storm water and non-storm water, the facility shall sample the storm water component of the discharge at a point upstream of the location where the non-storm water mixes with the storm water, if practicable.

EPA recognizes that in some instances it may not be practicable to sample the storm water component of a mixed stream discharge. EPA requests comment as to whether these discharges should be sampled in both dry weather conditions and wet weather conditions in order to characterize the non-storm water components of the discharge. EPA also requests comment on whether these types of discharges should be covered by the permit.

6. Representative Discharge

The proposed permit allows the use of substantially identical outfalls to reduce the monitoring burden on a facility. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. Facilities that select and sample a representative discharge are prohibited from changing the selected discharge in future monitoring periods unless the selected discharge ceases to be representative or is eliminated.

7. Sampling Waiver

The proposed permit allows for temporary waivers from sampling based on adverse climatic conditions. This temporary sampling waiver is only intended to apply to insurmountable weather conditions such as drought or dangerous conditions such as lightning, flash flooding, or hurricanes. These events tend to be isolated incidents and should not be used as an excuse for not conducting sampling under more favorable conditions associated with other storm events. The sampling waiver is not intended to apply to difficult logistical conditions, such as remote facilities with few employees or discharge locations which are difficult to access. Permittees are precluded from exercising this waiver more than once during a 2-year period.

8. Visual Examination of Storm Water Quality

All facilities covered under today's proposed permit are required to conduct visual inspections of storm water discharges. The visual inspection of storm water outfalls include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. Visual examinations are required on a monthly or quarterly basis, depending upon the type of industry.

The examination of the sample must be made in well lit areas. The visual examination is not required if there is insufficient rainfall or snow-melt to runoff or if hazardous conditions prevent sampling. Whenever practicable the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible in recording observations. Grab samples for the examination shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained on site with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

9. SARA Title III, Section 313 Facilities

Today's proposed permit does not contain special monitoring requirements for facilities subject to the Toxic Release Inventory (TRI) reporting requirements under Section 313 of the EPCRA. EPA has reviewed data submitted by facilities in the group application and determined that storm water monitoring requirements are more appropriately based upon the industrial activity or significant material exposed than upon a facility's status as a TRI reporter under Section 313 of EPCRA. This determination is based upon a comparison of the data submitted by TRI facilities included in the group application process to data from group application sampling facilities that were not found on the TRI list. Table 8 summarizes the data comparison. The data indicate that there are no consistent differences in the level of water priority chemicals present in samples from TRI facilities.

EPA requests comment on whether the monitoring requirements in the baseline general permit should be included in today's proposed permit.

TABLE 8.—COMPARISON OF POLLUTANT CONCENTRATION IN GRAB SAMPLES

Pollutant	Non-TRI facility median concentration (mg/L)	TRI facility median concentration (mg/L)	Non-TRI facility mean concentration (mg/L)	TRI facility mean concentration (mg/L)	Non-TRI facility 95th percentile concentration (mg/L)	TRI facility 95th percentile concentration (mg/L)
Acrylonitrile	0.100	0.000	0.085	0.000	0.100	0.000
Aluminum	0.922	0.819	12.061	28.893	58.000	12.000
Ammonia	0.640	0.000	10.507	23.231	9.500	17.200
Antimony	0.000	0.000	0.603	0.014	2.096	0.078
Arsenic	0.000	0.000	0.231	0.008	0.170	0.033
Benzene	0.000	0.000	0.001	0.000	0.001	0.000
Beryllium	0.001	0.000	0.002	0.080	0.007	0.400
Butylbenzyl phthalate	0.000	0.000	0.007	0.000	0.018	0.000
Cadmium	0.000	0.000	0.014	0.030	0.050	0.028
Chlorine	0.000	0.000	1.590	0.052	11.000	0.300
Chloroform	0.000	0.000	0.083	0.001	0.022	0.006
Chromium	0.006	0.000	1.236	0.109	0.250	0.270
Copper	0.047	0.028	1.430	0.344	2.200	1.300
Cyanide	0.000	0.000	0.021	0.007	0.008	0.020
Di-n-butyl phthalate	0.000	0.000	0.005	0.168	0.014	1.595
Dimethyl phthalate	0.000	0.000	0.005	0.000	0.016	0.000
Ethylbenzene	0.000	0.000	0.000	0.000	0.001	0.005
Hexavalent chromium	0.000	0.000	0.001	0.003	0.002	0.011
Lead	0.020	0.006	0.556	0.480	1.900	1.100
Manganese	0.150	0.090	2.015	0.273	9.550	1.244
Mercury	0.000	0.000	0.530	0.006	0.001	0.005
Naphthalene	0.000	0.000	2.998	0.001	24.000	0.013
Nickel	0.020	0.000	0.087	0.311	0.390	0.458
Phenols	0.000	0.000	0.063	0.019	0.100	0.075
Selenium	0.000	0.000	0.262	0.000	0.020	0.001
Silver	0.000	0.000	0.034	0.001	0.006	0.010
Toluene	0.000	0.000	0.052	0.011	0.037	0.009
Trichloroethylene	0.000	0.000	0.004	0.040	0.001	0.030
1,1,1-Trichloroethane	0.000	0.000	0.004	0.460	0.015	5.000
Xylene	0.000	0.000	0.000	0.004	0.003	0.037
Zinc	0.320	0.250	3.761	1.720	8.600	5.140

10. Compliance Monitoring

Several types of discharges (coal pile runoff, contaminated storm water at phosphate fertilizer manufacturing facilities, runoff from asphalt emulsion manufacturing facilities, and material storage pile runoff at cement manufacturing facilities) covered under today's permit are subject to numeric effluent limitations. Special monitoring requirements are included in today's proposed permit for these types of discharges. These requirements are in addition to any analytical monitoring or visual examination requirements specified elsewhere in the permit.

Discharges subject to numeric effluent limitations under the permit must be sampled annually. All samples are to be grabs taken within the first 30 minutes of discharge where practicable, but in no case later than the first 60 minutes of discharge. Where practicable, the samples shall be taken from the discharges subject to the numeric effluent limitations prior to mixing with other discharges.

Monitoring for these discharges is required to determine compliance with numeric effluent limitations. Facilities must submit the results of the compliance monitoring each year on the 28th day of the month following the anniversary of permit issuance. EPA requests comment as to whether the annual monitoring requirements are adequate to evaluate such compliance.

F. Numeric Effluent Limitations

1. Industry-specific Limitations

Part XI. of today's permit contains numeric effluent limitations for phosphate fertilizer manufacturing facilities, asphalt emulsion manufacturers, and cement manufacturers. Parts VIII.C.6., VIII.D.5., and VIII.E.6. of this fact sheet discuss these limitations.

2. Coal Pile Runoff

The following description of coal pile runoff is summarized from the "Final Development Document for Effluent Limitations Guidelines and Standards and Pretreatment Standards for the Steam Electric Point Source Category" (EPA–440/1–82/029), EPA, November 1982. A more complete description of coal pile runoff can be found in the development document.

The pollutants in coal pile runoff can be classified into specific types according to chemical characteristics. Each type relates to the pH of the coal pile drainage. The pH tends to be of an acidic nature, primarily as a result of the oxidation of iron sulfide in the presence of oxygen and water. The potential influence of pH on the ability of toxic and heavy metals to leach from coal piles is of particular concern. Many of the metals are amphoteric with regard to their solubility behavior. These factors affect acidity, pH, and the subsequent leaching of trace metals:

- Concentration and form of pyritic sulfur in coal;
- Size of the coal pile;
- Method of coal preparation and clearing prior to storage;
- Climatic conditions, including rainfall and temperature;
- Concentrations of calcium carbonate and other neutralizing substances in the coal;
- Concentration and form of trace metals in the coal; and
- The residence time of water in the coal pile.

Coal piles can generate runoff with low pH values, with the acid values

being quite variable. The suspended solids levels can be significant, with levels of 2,500 mg/L not uncommon. Metals present in the greatest concentrations are copper, iron, aluminum, nickel, and zinc. Others present in trace amounts include chromium, cadmium, mercury, arsenic, selenium, and beryllium.[16]

Today's proposed permit establishes effluent limitations of 50 mg/L total suspended solids and a pH range of 6.0–9.0 for coal pile runoff. Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff associated with a 10-year, 24-hour rainfall event is not subject to the 50 mg/L limitation for total suspended solids. Steam electric generating facilities must comply with these limitations upon submittal of the NOI. All other types of facilities must comply with this requirement as expeditiously as practicable, but in no event later than 3 years from the date of permit issuance.

G. Regional Offices

1. Notice of Intent Address

Notices of Intent to be authorized to discharge under this permit should be sent to:

Address will be provided when permit is issued in final.

2. Address for Other Submittals

Other submittals of information required under this permit or individual permit applications should be sent to the appropriate EPA Regional Office:

a. CT, MA, ME, NH, RI, VT
EPA, Region I, Water Management Division, (WCP–2109), Storm Water Staff, John F. Kennedy Federal Building, Room 2209, Boston, MA 02203

b. NJ, NY, PR, VI
EPA, Region II, Water Management Division, (2WM–WPC), Storm Water Staff, 26 Federal Plaza, New York, NY 10278

c. DE, DC, MD, PA, VA, WVa
EPA, Region III, Water Management Division, (3WM55), Storm Water Staff, 841 Chestnut Building, Philadelphia, PA 19107

d. FL and Indian Lands in AL, FL, MS, and NC
EPA, Region IV, Water Management Division, Permits Section (WPEB–7), 345 Courtland Street, NE, Atlanta, GA 30365

e. AR, LA, NM (except see Region IX for Navajo lands, and see Region VIII for Ute Mountain Reservation lands), OK, TX
EPA, Region VI, Water Management Division, (6W–EA), Storm Water Staff, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, 12th Floor, Suite 1200, Dallas, TX 75202

f. CO, MT, ND, SD, WY, UT (except see Region IX for Goshute Reservation and Navajo Reservation lands) and Portions of Pine Ridge Reservation in Nebraska
EPA, Region VIII, NPDES Branch (8WM–C), 999 18th Street, Suite 500, Denver, CO 80202–2466

NOTE—For Montana Indian Lands, please use the following address:
EPA, Region VIII, Montana Operations Office, Federal Office Building, Drawer 10096, 301 South Park, Helena, MT 59620–0026

g. AZ, CA, NV, Guam, American Samoa, Johnston Atoll, Midway and Wake Islands, Commonwealth of the Northern Mariana Islands, the Republic of Palau, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in NV and ID
EPA, Region IX, Water Management Division, (W–5–1), Storm Water Staff, 75 Hawthorne Street, San Francisco, CA 94105

h. AK, ID (except see Region IX for Duck Valley Reservation lands), OR (except see Region IX for Fort McDermitt Reservation lands), WA
EPA, Region X, Water Division, (WD–134), Storm Water Staff, 1200 Sixth Avenue, Seattle, WA 98101

H. Compliance Deadlines

For most permittees, today's permit proposes a deadline of 270 days following final issuance for development of pollution prevention plans and for compliance with the terms of the plan.

Today's proposed general permit provides additional time if constructing structural best management practices is called for in the plan. The portions of a plan addressing these BMP construction requirements must provide for compliance with the plan as soon as practicable, but in no case later than 3 years from the effective date of the permit. However, storm water pollution prevention plans for facilities subject to these additional requirements must be prepared within 270 days of permit finalization and provide for compliance with the baseline terms and conditions of the permit (other than the numeric effluent limitation) as expeditiously as practicable, but in no case later than 270 days after permit finalization.

Facilities are not required to submit the pollution prevention plans for review unless they are requested by EPA or by the operator of a large or medium municipal separate storm sewer system. When a plan is reviewed by EPA, the Director can require the permitted to amend the plan if it does not meet the minimum permit requirements. Facilities which are subject to the requirements listed in Part XI.C. (Chemical and Allied Product Manufacturing) of today's proposed permit are required to submit certification to EPA which states that the pollution prevention plan has been prepared and implemented in accordance with the terms and conditions of the permit. EPA requests comment as to whether the permit should require all permittees to submit such certification.

VII. Cost Estimates for Common Permit Requirements

The conditions of today's general permit reflect the baseline permit requirements established in EPA's NPDES permits for Storm Water Discharges Associated With Industrial Activity (57 FR 41175 and 57 FR 44412). The requirements found under today's permit are more specific to the conditions found in the industries. EPA does not consider these requirements to be more costly than the pollution prevention plan requirements established in the baseline general permit. The following section contains the estimates of the cost of compliance with the baseline permit requirements.

A. Pollution Prevention Plan Implementation

Storm water pollution prevention plans for the majority of facilities will include relatively low cost baseline controls. EPA's analysis of storm water pollution prevention plans indicates that the cost of developing and implementing of these plans is variable and will depend on a number of the following factors: The size of the facility, the type and amount of significant materials stored or used at a facility, the nature of the plant operations, the plant designs (e.g., the processes used and layout of a plan), and the extent to which housekeeping measures are already employed. Table 9 provides estimates of the range of costs for preparing and implementing the common requirements for a storm water pollution prevention plan. It is expected that the low cost estimates provided in Table 9 are appropriate for the majority

[16] A more complete description of pollutants in coal pile runoff is provided in the "Final Development Document for Effluent Limitations Guidelines and Standards and Pretreatment Standards for the Steam Electric Point Source Category," (EPA–440/1–82/029), EPA, November 1982.

of smaller facilities. The high cost estimates in Table 9 are more applicable to larger, more complex facilities with more potential sources of pollutants. Please note that the costs in this table exclude special requirements, such as EPCRA 313 requirements.

TABLE 9.—SUMMARY OF ESTIMATED RANGES OF COSTS FOR COMPLIANCE WITH STORM WATER POLLUTION PREVENTION PLANS WITH BASELINE REQUIREMENTS

	Low costs		High costs	
	First year costs	Annual costs	First year costs	Annual costs
Submittal of NOI	$14	.....	$14	
Notification of Municipality	14	.....	14	
Plan Preparation	1,518	.....	76,153	
Plan Implementation	90	$294	35,400	$9,371
Comprehensive Site Compliance Evaluation/Plan Revision	.....	267	.....	8,875
Reportable Quantities	(1)	(1)	8,501	.....
Total	1,636	561	120,082	18,246

This table identifies estimated low and high costs (in 1992 dollars) to develop and implement storm water pollution prevention plans.
Low costs of implementing program components are zero where existing programs or procedures is assumed adequate.
The estimated costs for plan preparation and plan revisions includes costs of preparing/revising plan to address baseline requirements and any applicable special requirements, such as EPCRA Section 313 coal pile requirements. However, the costs of implementing special requirements, such as those for EPCRA Section 313 facilities coal piles and salt piles are not otherwise addressed in this table.
[1] No Cost.

B. Cost Estimates for EPCRA Section 313

Table 10 provides estimates of the range of costs of preparing and implementing a storm water pollution prevention plan for facilities subject to the special requirements for facilities subject to EPCRA Section 313 reporting requirements for chemicals classified as "Section 313 water priority chemicals." EPA expects the majority of facilities to have existing containment systems that meet the majority of the requirements of this permit. High cost estimates correspond to facilities that are expected to be required to undertake some actions to upgrade existing containment systems to meet the requirements of this permit.

TABLE 10.—SUMMARY OF ESTIMATED ADDITIONAL COSTS FOR COMPLIANCE WITH STORM WATER POLLUTION PREVENTION PLANS FOR FACILITIES SUBJECT TO SECTION 313 OF EPCRA FOR WATER PRIORITY CHEMICALS

	Low costs		High costs	
	Costs during first 3 years	Annual costs	Costs during first 3 years	Annual costs
Plan Preparation	$830	.....	$0	.....
Liquid Storage Areas	.....	.....	11,200	.....
Material Storage Areas	.....	.....	560	.....
Loading Areas	.....	.....	21,000	.....
Process Areas	.....	.....	11,190	.....
Drainage/Runoff	.....	.....	7,750	.....
Housekeeping/Maintenance	.....	.....	.....	$5,957
Facility Security	.....	.....	3,240	.....
Employee Training	.....	.....	.....	1,403
PE Certification	.....	$53	.....	1,000
Monitoring Costs	.....	2,424	.....	4,847
Toxicity Reduction	.....	.....	.....	3,046
Totals	830	2,477	54,940	16,253

This table identifies estimated additional low and high costs to develop and implement storm water pollution prevention plans for EPCRA Section 313 facilities subject to special conditions.
Low costs of implementing program components are zero where existing programs, procedures or security is assumed adequate.
The high costs for preparing pollution prevention plans to include EPCRA Section 313 additional requirement were addressed as part of the estimated high costs for preparation of baseline pollution prevention plans (see Table 9).
PE Certification is only required once every 3 years. Cost shown if averaged over 3-year period.

C. Cost Estimates for Coal Piles

The effluent limitations for coal pile runoff in the proposed permit can be achieved by these two primary methods: limiting exposure to coal by use of covers or tarpaulins and collecting and treating the runoff. In some cases, coal pile runoff may be in compliance with the effluent limitations without covering of the pile or collection or treatment of the runoff. In these cases, the operator of the discharge would not have a control cost.

The use of covers or tarpaulins to prevent or minimize exposure of the coal pile to storm water is generally expected to be practical only for relatively small piles. Coal pile covers or tarpaulins are anticipated to have a fixed cost of $400 and annual cost of $160.

Table 11 provides estimates of the costs of treating coal pile runoff.[17] These costs are based on a consideration of a treatment train requiring equalization, pH adjustment, and settling, including the costs for impoundment (for equalization), a lime feed system and mixing tanks for pH adjustment, and a clarifier for settling. The costs for the impoundment area include diking and containment around each coal pile and associated sumps and pumps and piping from runoff areas to the impoundment area. The costs for land are not included. The lime feed system employed for pH adjustment includes a storage silo, shaker, feeder, and lime slurry storage tank, instrumentation, electrical connections, piping, and controls.

Additional costs may be incurred if a polymer system is needed. In this case, costs would include impoundment for equalization, a lime feed system, mixing tank, and polymer feed system for chemical precipitation, a clarifier for settling, and an acid feeder and mixing tank to readjust the pH within the range of 6 to 9. The equipment and system design, with the exception of the polymer feeder, acid feeder, and final mixing tank, are essentially the same as shown in Table 11. Two tanks are required for a treatment train with a polymer system, one for precipitation and another for final pH adjustment with acid. The cost of mixing is therefore twice that shown in Table 11. The polymer feed system includes storage hoppers, chemical feeder, solution tanks, solution pumps, interconnecting piping, electrical connections, and instrumentation. The costs of clarification are identical to that of Table 11. A treatment train with a polymer system requires the use of an acid addition system to readjust the pH within the range of 6 to 9. The components of this system include a lined acid storage tank, two feed pumps, an acid pH control loop, and associated piping, electrical connections, and instrumentation.

Additional information regarding the cost of these technologies can be found in "Development Document for Effluent Limitations Guidelines and Standards and Pretreatment Standards for the Steam Electric Point Source Category," (EPA–440/182/029), November 1982, EPA.

TABLE 11.—SUMMARY OF ESTIMATED COSTS FOR TREATMENT OF COAL PILE RUNOFF

	30,000 cubic meter coal pile	120,000 cubic meter coal pile
Impoundment:		
Installed Capital Cost ($)	5,850	6,850
Operation and Maintenance ($/year)	negligible	negligible
Lime Feed System:		
Installed Capital Cost ($)	138,800	255,700
Operation and Maintenance ($/year)	5,780	10,655
Energy Requirements (kwh/yr)	3.6 x 10**4	3.6 x 10**4
Land Requirements (ft**2)	5,000	5,000
Mixing Equipment:		
Installed Capital Cost ($)	65,750	91,320
Operation and Maintenance ($/year)	2,280	2,430
Energy Requirements (kwh/yr)	1.3 x 10**3	3.3 x 10**3
Land Requirements (ft**2)	2,000	2,000
Clarification:		
Installed Capital Cost ($)	182,650	237,450
Operation and Maintenance ($/year)	3,200	3,650
Energy Requirements (kwh/yr)	1.3 x 10**3	3.3 x 10**3
Land Requirements (acres)	0.1	0.1

Source: "Development Document for Effluent Limitations Guidelines and Standards and Pretreatment Standards for the Steam Electric Point Source Category" (EPA–440/182/029), November 1982, EPA). Costs estimates are in 1992 dollars.

D. Cost Estimates for Salt Piles

Salt pile covers or tarpaulins are anticipated to have a fixed cost of $400 and an annual cost of $160 for medium-sized piles and a fixed cost of $4,000 and an annual cost of $2,000 for very large piles. Structures such as salt domes are generally expected to have a fixed cost of between $30,000 for small piles ($70 to $80 per cubic yard) and $100,000 for larger piles ($18 per cubic yard) with costs depending on size and other construction parameters.

VIII. Special Requirements for Discharges Associated With Specific Industrial Activities

The industry-specific requirements allow the implementation of site-specific measures that address features, activities, or priorities for control associated with the identified storm water discharges. This framework provides the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with the different types of industrial activity addressed by this permit. This approach also assures that facilities have the opportunity to identify procedures to prevent storm water pollution at a particular site that are appropriate, given processes employed, engineering aspects, functions, costs of controls, location, and age of the facility (as contemplated by 40 CFR 125.3). The approach taken also allows the flexibility to establish controls that can appropriately address different sources of pollutants at different facilities.

A. Storm Water Discharges Associated With Industrial Activity From Timber Products Facilities

1. Background

EPA has identified those group applicants whose facilities are most appropriately categorized under Standard Industrial Classification (SIC) Major Group 24—Lumber and Wood

[17] The type and degree of treatment required to meet the effluent limitations of this permit vary depending on factors such as the amount of sulfur in the coal. This section describes a model treatment scheme for estimating costs for compliance with the effluent limitations. Dischargers may implement other less expensive treatment approaches to enable them to discharge in accordance with these limits where appropriate.

Products, Except Furniture, as Timber Products Facilities to be covered under this section of today's proposed permit. SIC Major Group 24 represents those "establishments engaged in cutting timber and pulpwood, merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in wood preserving or in manufacturing finished articles made entirely of wood or related materials."[18] Storm water discharges associated with industrial activity are defined in 40 CFR 122.26(b)(14) as discharges "from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant." In general, discharges of storm water from timber products facilities will include all discharges where precipitation or storm water runon come into contact with significant materials including, but not limited to: industrial plant areas; immediate access roads and rail lines used or traveled by carriers of materials (raw, manufactured, or waste); material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of materials handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; storage areas for raw, intermediate, and finished products; manufacturing buildings; and any areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

2. Coverage Under This Section

Coverage under this section will be limited to those facilities with similar industry-specific activities. EPA is defining the eligibility for coverage under this section to those facilities whose primary SIC Major Group is 24, except SIC Code 2434 (wood kitchen cabinets manufacturers). Permit conditions for facilities identified by SIC Code 2434 are discussed elsewhere in today's proposed permit. EPA believes that limiting the coverage under this section to facilities classified as SIC Major Group 24, except SIC Code 2434, is a plausible approach to permitting because many of the industrial activities conducted under the above SIC Codes are similar as are many of the materials that would be exposed to storm water.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

Facilities under SIC Code 2434 (wood kitchen cabinets) are excluded from coverage under this section because EPA believes it is more appropriate to cover manufacturers of wood cabinets with furniture manufacturing facilities under SIC Major group 25. As indicated in the November 16, 1990, **Federal Register** (55 FR 48008), "Facilities under SIC Code 2434 and 25 are establishments engaged in furniture making." EPA believes that this grouping is more appropriate due to the typical use by cabinet makers of wood treating solutions such as mineral spirits and propenyl butyl.[19] This practice is common to wood furniture manufacturing, but is atypical of the other industrial operations performed under SIC Major group 24.

Certain silvicultural activities are exempted from the requirement to be covered under National Pollutant Discharge Elimination System (NPDES) storm water permits (40 CFR 122.27). In accordance with 40 CFR 122.27(b), point sources that must be covered by an NPDES permit are "any discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities, which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States." Exemptions are granted for nonpoint source silvicultural activities, including harvesting operations (see 40 CFR 122.27).

It is EPA's determination that harvesting activities include: the felling, skidding, preparation (e.g., delimbing and trimming), loading and initial transport of forest products from an active harvest site. An active harvest site is considered to be an area where harvesting operations are actually on-going. EPA also interprets the definition of harvesting operations to include incidental stacking and temporary storage of harvested timber on the harvest site prior to its initial transport to either an intermediate storage area or other processing site. EPA considers this activity to be an inherent part of harvesting operations. However, EPA does not intend the definition of active harvesting operations to include sites that are processing, sorting, or storing harvested timber which has been transported there from one or more active harvesting sites. Consequently, EPA considers these site activities a point source under 40 CFR 122.27(b)(1) and operators of these sites must seek an NPDES permit for discharges of storm water.

Effluent guidelines have been promulgated for the Timber Products Processing Point Source Category at 40 CFR part 429 (46 FR 8260; January 26, 1981). Under these regulations, effluent limitations and standards were set for process wastewaters from any timber products processing operation, and any plant producing insulation board with wood as the major raw material. The definition of process wastewater excluded "noncontact cooling water, material storage yard runoff (either raw material or processed wood storage) and boiler blowdown. For the dry process hardboard, veneer, finishing, particleboard, and sawmills and planing mills subcategories, fire control water is excluded from the definition." Any discharge subject to an effluent limitation guideline is not eligible for coverage under this section. Even though discharges of boiler blowdown and noncontact cooling water are not considered "process water discharges," they do not fall under the definition of storm water discharges. As such, this section does not provide for their coverage. In addition, contact cooling waters and water treatment wastewater discharges from steam operated sawmills will not be covered. Finally, material storage yard runoff, exempted

[18] "Handbook of Standard Industrial Classifications," Office of Management and Budget, 1987.

[19] Part 1 Storm Water Group Permit Applications. Summaries from individual applicant descriptions including Applicant No. 1156 (Westvaco), Applicant No. 92 (Bowater), and Applicant No. 866 (Louisiana-Pacific).

from coverage under the effluent limitation guidelines, is eligible to be covered in accordance with the terms and conditions of this section.

In addition, it should be noted that certain wood preserving wastes have been listed under 40 CFR 261.31 as hazardous wastes from nonspecific sources (55 FR 50450; December 6, 1990). Wastes from wood surface protection have also been proposed for listing under this subpart (53 FR 53282; December 30, 1988, and 58 FR 25706; April 27, 1993). Wastewaters, process residuals, preservative or protectant drippage, and spent formulations from wood preserving processes that use chlorophenolic formulations, creosote formulations, or arsenic and chromium formulations have been listed as hazardous wastes. Proposed regulations for wood surface protection identify wastewaters, process residuals, protectant drippage, and discarded spent formulation at facilities that use in-process formulations with pentachlorophenol concentrations of greater than 0.1 mg/L as hazardous wastes. Pentachlorophenol concentrations of greater than 0.1 mg/L may be found at facilities that currently use chlorophenolic formulations for surface protection and at facilities that have used them in the past. Storm water discharges that come in contact and/or commingle with these wastes will be considered a hazardous waste and will not be authorized for discharge under this section. Despite the listing of these wastes, however, there remains a potential for storm water to become contaminated through incidental activities such as tracking of materials, fugitive emissions, and miscellaneous other activities. These discharges are covered under this section.

3. Industry Profile/Description of Industrial Activities

Facilities engaged in activities classified under SIC Major Group 24 use wood as their primary raw material. Although there is diversity among the types of final products that are produced at timber products facilities, there are common industrial activities performed among them. These activities are broadly classified for ease of discussion and include the following:

- Log storage and handling
- Untreated wood lumber and residue generation activities, and untreated wood materials storage
- Wood surface protection activities, and chemicals and surface protected materials storage
- Wood preservation activities, and chemicals and preserved wood material storage
- Wood assembly/fabrication activities and final fabricated wood product storage
- Equipment/vehicle maintenance, repair and storage.

In many cases, more than one of these activities may be conducted at a single facility location.

a. Log storage and handling. Log storage and handling activities may occur onsite at many types of facilities covered under this section of today's proposed permit, such as wood collection yards and lumber processing and veneer manufacturing facilities. However, facilities that are primarily engaged in these activities (e.g., wood collection yards) are most appropriately classified under SIC Code 2411.

Typical industrial activities performed include loading and unloading of logs onto trucks or railroad cars for transport to other facilities, log sorting, and storage of logs. In addition, some cutting may be performed such as chopping off tree branches and sectioning of tree trunks for easier handling during transport. Although not typically performed at wood collection facilities, chipping may be performed at facilities serving pulp industries. Residues generated at these sites may include bark, coarse sawdust, and wood chunks.

Significant materials that have the potential to come in contact with storm water discharges at facilities practicing these activities include: uncut logs (hardwood and softwoods), wood bark, wood chips, coarse saw dust, other waste wood material, petroleum and other products for equipment maintenance (fuels, motor oils, hydraulic oils, lubricant fluids, brake fluids, and antifreeze), herbicides, pesticides, and fertilizers, material handling equipment (forklifts, loaders, vehicles, chippers, debarkers, cranes, etc.).

These log storage and handling activities described above have the potential to discharge pollutants including bark and wood debris, total suspended solids (TSS), and leachates.[20] The leachate generated from these operations from the decay of wood products can contain high levels of TSS and biochemical oxygen demand (BOD_5).[21]

b. Untreated wood lumber and residue generation activities and untreated wood materials storage. The primary product from sawmills and other cutting activities is lumber. However, residues such as debarked wood chips; whole tree chips and slab wood; bark; and sawdust constitutes approximately 25 percent of the total wood production.[22] At large saw mills, approximately 2,500 lbs of residue is generated for each 1,000 board feet of lumber derived.[23]

Facilities that produce untreated lumber and residues can be classified under most of the SIC Codes in Major group 24. These facilities include saw mill and planing mill facilities classified in groups 242; millwork, veneer, plywood and structural wood member manufacturing facilities classified in group 243; wood container manufacturing facilities in group 244; wood building and mobile home manufacturing facilities in group 245; and miscellaneous wood product manufacturers in group 249.

These facilities may engage in one or more activities such as log washing, bark removal, milling, sawing, resawing edging, trimming, planing, machining, air drying, and kiln drying. In addition, there may be associated boiler operations, loading and unloading activities and storage activates.

Effluent guidelines have been established at 40 CFR part 429 subparts A, I, and J for discharges from log washing, debarking and wet storage, respectively. These discharges are considered process waters and are subject to the effluent limits of each subpart.

Some facilities generate residue as a product, in lieu of lumber or other finished products, while other facilities may generate residues as a waste product. In most cases, there are markets for these residues. For example, chips and sawdust are used in the production of pulp and paper and wood products manufacturing. A summary of the residues generated and their potential uses include:

- Bark: Landscaping, compost, recreational applications (trails), energy recovery
- Wood chips: Pulp and paper mill feed, landscaping, recreational applications, fire logs, energy recovery
- Planer shavings: Particle board, livestock bedding, compost, fire logs, domestic pet litter, energy recovery

[20] "NPDES Docket No. 1065–07–22–402, NPDES Appeal No. 88–14: In the Matter of Shea Atika, Incorporated," January 21, 1988.

[21] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

[22] "Using Best Management Practices to Prevent and Control Pollution from Hardwood Residue Storage Sites," Pennsylvania Hardwoods Development Council, May 15, 1992.

[23] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

• Sawdust: Particle board, livestock bedding, compost, fire logs, domestic pet litter, energy recovery.[24]

Storage activities at these sites include wet and dry storage of logs and storage of residuals. Wet storage, called "wet decking," is a process used when logs are to be stored for an extended period of time. Wet storage retards decaying and infestation by insects. The logs may be stored under water in ponds or may be placed in areas where water is continuously sprayed over them. Residuals are typically stored dry.

Storm water discharges from lumber and residue generation and storage may come in contact with the following types of wastes at the facility which can then contribute pollutants to the storm water: uncut logs (hardwood and softwoods), wood bark, wood chips, wood shavings, sawdust, green lumber, rough and finished lumber, other waste wood material, nonhazardous wood ash, above and below ground fuel storage tanks for diesel, gasoline, propane and fuel oil, finishing chemicals (stain, lacquer, varnish, paints, water repellant, sealants), solvents and cleaners, petroleum and other products for equipment maintenance (fuels, motor oils, hydraulic oils, lubricant fluids, brake fluids, and antifreeze), herbicides, pesticides, and fertilizers, sawmill equipment, material handling equipment (Forklifts, loaders, vehicles, chippers, debarkers, cranes, etc.), boiler water treatment chemicals, scrap metals, scrap equipment and plastics, boiler blowdown water, and leachate from decaying organic matter.

Pollutants resulting from lumber and residue generation and storage activities are typically conventional in nature. Low pH levels can result from the leachate of decaying organic materials. TSS and BOD_5 may be elevated in this leachate.[25] In addition to leachate, washed away residue particles contribute to TSS loadings. Equipment and machinery at the facility site may result in the discharge of oil and grease.

c. Wood surface protection activities, chemicals and surface protected materials storage. At many hardwood saw mills, wood surface protection is conducted to prevent sap stain. Sap stain is the unsightly discoloration of lumber products caused by fungus.[26] Surface protection is a cosmetic fix only and differs from wood preservation which is a practice designed to enhance the wood's structural integrity.

Surface protection is accomplished by one of three methods:

• Spraying, ranging from manual spraying with a garden hose to more sophisticated on-line high pressure spray boxes

• Dipping, a batch process where lumber is immersed then removed from the formulation

• Green chain operations, a continuous immersion operation where lumber is pulled through the protection tanks by conveyer.[27]

Historically, the primary chemical used in surface protection has been commercial pentachlorophenate. Concentrated chemicals are diluted to 0.5 to 1 percent pentachlorophenol for surface protection. This concentration is lower than the 2 percent to 9 percent pentachlorophenol used in wood preserving. Producers of chlorophenolic formulations used in surface protection have recently discontinued the product due to the pending hazardous waste regulations and it is expected that stocks will soon be exhausted. Alternatives to pentachlorophenate solutions which have been developed and are currently used include:

• Iodo-prophenyl butyl carbamate, dimethyl sulfoxide, didecyl dimethyl ammonium chloride mixtures

• Sodium azide mixtures

• Iodo-prophenyl butyl carbamate, didecyl dimethyl ammonium chloride mixture

• 8-quinolinol, copper (II) chelate mixtures

• Iodo-prophenyl butyl carbamate mixtures

• Sodium ortho-phenylphenate mixtures

• 2-(thiocyanomethylthio)-benzothiozole (TCMTB) and methylene bis (thiocyanate) mixture

• Zinc naphthenate mixtures.[28]

Industrial activities at saw mills with the potential to contaminate storm water include spills from surface protection areas, storage and mixing tank areas, treated wood drippage, transport or storage areas, maintenance and shop areas, and areas used for treatment/disposal of wastes. Fugitive emissions from negative pressure spraying activities and hand spraying surface protection formulations may also result in the contamination of storm water.[29]

Significant materials that have the potential to come in contact with storm water discharges at facilities practicing these activities include: all of the materials stated in 3.b. above (under untreated wood lumber and residue generation activities and untreated materials storage) plus treated lumber, treatment chemicals, and treatment equipment (dipping tanks, green chain, material handling equipment, etc.).

Pollutants which result from these types of surface protection operations may include the constituents of those surface protection chemicals listed above, as well as aggregate parameters such as BOD_5, COD, and TSS.

d. Wood preservation activities, and chemicals and preserved wood material storage. Wood preserving is the application of chemicals to wood and wood products to preserve the structural integrity of the wood. Wood preserving is designed to prevent/delay the deterioration/decay of wood through the addition of flame retardants, water repellents, and chemicals. Wood preserving differs from wood surface protection which is generally performed for aesthetic reasons.[30]

Wood preserving is accomplished by two steps. First, the moisture content of wood is reduced to increase its permeability (this is referred to as conditioning). Conditioning may be accomplished by: (1) Allowing wood to dry at ambient temperatures; (2) kiln drying; (3) steaming the wood, then applying a vacuum; (4) dipping the wood in a heated salt bath; or (5) vapor drying, and immersing the wood in a solvent (usually naphtha or Stoddard solvent). After conditioning, wood is impregnated with a preservative for fire retardency, insecticidal resistance, and/or fungicidal resistance. Preservation may be accomplished by either nonpressurized and pressurized methods. The nonpressurized method involves dipping stock in a bath containing the preservatives (either heated or at ambient temperatures), while pressurized methods involve subjecting the wood to the preservative when under pressure. After treatment, the wood stock is often subject to cleaning in order to remove excess

[24] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

[25] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

[26] "Background Document Supporting the Proposed Listing of Wastes From Surface Protection Processes, Part One Final Engineering Analysis Volume 1," EPA Office of Solid Wastes, February 1993.

[27] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

[28] "Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

[29] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

[30] "Background Document Supporting the Proposed Listing of Wastes From Surface Protection Processes, Part One Final Engineering Analysis Volume 1," EPA Office of Solid Wastes, February 1993.

preservative prior to stacking treated lumber products outside.[31]

There are a number of different avenues by which wood preserving wastes may contaminate storm water. These may include:

- Drippage of condensate or preservative after pressurized treatment
- Washing after preservation to remove excess preservative, which usually occurs either in the treatment or storage areas
- Spills and leaks from process equipment and preservative tanks
- Fugitive emissions from vapors in the process, as well as blow outs and emergency pressure releases
- Kick-back (phenomenon where preservative leaks as it returns to normal pressure) from the lumber.[32]

A wide variety of chemicals are used in the preservation of wood, the most common are creosote, pentachlorophenol and inorganics.

Creosote-based preservatives are mixtures of coal-tar derivatives and creosote solutions (creosotes fortified with insecticide additives such as pentachlorophenol, arsenic trioxide, copper compounds or malathion). Pentachlorophenol preservatives are typically formulations using petroleum solvents and 5 percent total pentachlorophenol. Waxes and resins may also be added.[33] Inorganic preservatives consist of arsenical and chromate salts and fluorides dissolved in water. The most commonly used inorganic preservatives include:[34]

- Chromated Copper Arsenate (CCA)
- Ammoniacal Copper Arsenate (ACA)
- Acid Copper Chromate (ACC)
- Chromated Zinc Chloride (CZC)
- Fluor-Chrome-Arsenate-Phenol (FCAP).

Significant materials that have the potential to come in contact with storm water discharges at facilities practicing wood preservation include: all of the materials stated in 3.b. (untreated wood lumber and residue generation activities and untreated wood materials storage) plus treated lumber, treatment chemicals, and treatment equipment (preservative, tanks, preservative contaminated material handling equipment.

Pollutants expected to be discharged from wood preserving facilities typically include conventional pollutants such as BOD_5, TSS and oil and grease, as well as toxics which are dependent upon the preserving formulations used. Organic solvent components such as benzene, toluene, xylene, and ethylbenzene can be found at pentachlorophenol preservation operations. Phenolic compounds such as phenol, chlorophenols, nitrophenols can be found at plants using pentachlorophenol and creosote preservatives. The polynuclear aromatic hydrocarbons of creosote, including anthracene, pyrene, and phenanthrene are often contained in the entrained oils. High phenolic, COD, and oil and grease concentrations have been noted to result from creosote and pentachlorophenol operations. Traces of copper, chromium, arsenic, zinc, and boron often can be found in the wastewaters of plants which use waterborne salt preservatives.[35]

e. Wood assembly/fabrication activities and final fabricated wood product storage. The industrial activities conducted as part of the assembly and fabrication process are very diverse. For the most part, industrial activities that have the potential to come in contact with precipitation are similar to those described under lumber and residue generation (see Section A.3.b). However, there are a number of additional industrial activities that differ. For example, the fabrication of fiberboard, insulation board, and hardboard may involve the use of wax emulsions, paraffin, aluminum sulfate, melamine formaldehyde, and miscellaneous thermosetting resins. These chemicals may be introduced as part of the board formation process or as a coating to maintain the board's integrity. Generally, these additives account for less than 20 percent of the board. In the formation of fiberboard/insulation board/hardboards, the digestion of pulp and fiber by mechanical, thermal, and sometimes chemical means takes place.[36] Another operation which involves resinous agents is the formation of veneer. In this process, veneer is placed in hot ponds or vats to soften the wood. Veneer strips are removed and often bound by glue or a resinous agent. Glues are also used in the assembly of wood components.[37] Other types of activities include the finishing of wood products. Stains, paints, lacquers, varnish, water repellents and sealants, etc. may be applied to some of the wood products. Many of these materials may not have the potential to come in contact with precipitation as most of these processes are performed within a covered area or building.

Pollutants expected to be found in storm water discharges at facilities that perform these types of industrial activities include BOD_5 and TSS. Oil and grease may be present due to material handling equipment and transport vehicles.

f. Equipment/vehicle maintenance, repair and storage. Many of the facilities included in the SIC Major group 24 employ the use of material handling equipment, vehicles and other machinery. These facilities store the equipment onsite and may also engage in maintenance and repair activities on them. These types of activities are performed in either covered or outdoor areas of the facility. Associated with these activities is the storage of significant materials such as petroleum products and other maintenance fluids such as fuels, motor oil, hydraulic oils, lubricant fluids, brake fluids, solvents, cleaners and antifreeze.

4. Pollutants Contributing to Storm Water Contamination

It is expected that pollutants entering storm water discharges from timber product facilities will be variable because of the fact that the facilities may practice different types of industrial activities, and will have different amounts and types of significant materials exposed onsite. The concentrations are also expected to be variable because of the types and efficiencies of best management practices that may already be employed at the sites. Because of similarities among the activities described above, there are pollutants of concern that will be present at all facilities.

Because of the variables discussed above, it is generally appropriate to discuss the potential pollutants at timber product facilities as a whole and

[31] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[32] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

[33] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

[34] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

[35] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[36] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[37] Part 1 Storm Water Group Permit Applications. Summaries from individual applicant descriptions including Applicant No. 1156 (Westvaco), Applicant No. 92 (Bowater), and Applicant No. 866 (Louisiana-Pacific).

not separate them out according to specific activities. Table A–1 provides the pollutant data provided in part 2 storm water group applications for all the timber product facilities that submitted sampling data. The only industrial activity that will be discussed separately is wood preservation, as facilities engaged in this activity most certainly manage materials that are specific to this activity. These industrial activities could be separated out in the data collected for part 2 of the group applications because wood preservation facilities have their own SIC Code of 2491. Table A–2 provides the part 2 storm water group application pollutant data from wood preservation facilities that classified themselves under SIC Code 2491. Facilities that practice wood surface protection could not be singled out because this type of activity may occur at many types of facilities that produce lumber or wood products.

The group application part 2 data was analyzed for relative pollutant concentrations to aid in the determination of pollutants of concern for this industry. In addition, the existing literature was consulted to determine which pollutants have the potential to be present based on the activities at the sites. This information can assist in providing an indication of what is present and which pollutants are of concern. Most of the facilities utilize some best management practices (BMPs) to limit the pollutant concentrations in storm water discharges.

TABLE A–1.—STATISTICS FOR PART VII.A. OF FORM 2F POLLUTANTS FOR ALL TIMBER PRODUCT FACILITIES SUBMITTING DATA[1] (MG/L)

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	198	200	39.6	45.4	0.0	0.0	580.0	1925.0	13.0	17.0	193.0	135.5	440.0	544.0
COD	198	198	297.6	242.5	0.00	0.000	3315.0	1804.0	131.0	122.5	1500.0	1080.0	2156.0	1700.0
Nitrate + Nitrite Nitrogen	189	188	0.95	0.75	0.00	0.000	66.0	22.50	0.320	0.335	2.20	1.79	14.30	13.00
Total Kjeldahl Nitrogen	188	188	2.57	2.32	0.00	0.000	21.00	27.00	1.620	1.500	9.26	7.50	14.70	12.50
Oil & Grease	207	N/A	15.2	N/A	0.00	N/A	591.7	N/A	2.2	N/A	55.0	N/A	347.5	N/A
pH	211	N/A	N/A	N/A	3.6	N/A	16.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	198	199	23.91	6.29	0.00	0.000	3000.00	1160.00	0.287	0.300	2.66	1.72	1610.00	3.97
Tot. Suspended Solids	198	198	1108	575	0	0	18000	6460	242	230	4800	2288	17000	5192
Arsenic	27	22	.025	.028	0	0	.2	.18	.009	.01	.13	.14	.2	.18
Copper	28	25	.047	.041	0	0	.16	.15	.026	.034	.16	.123	.16	.15
Total Phenols	35	10	.02	.007	0	0	.399	.062	0	0	.211	.062	.394	.062

[1] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

TABLE A–2.—STATISTICS FOR PART VII.A. OF FORM 2F POLLUTANTS FOR ALL WOOD PRESERVING ACTIVITIES [1] (MG/L)

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	13	13	14.5	14.3	2.4	2.1	39.0	32.0	13.7	12.4	39.0	32.0	39.0	32.0
COD	13	13	115.2	98.7	36.0	31.0	274.0	191.0	100.0	96.0	274.0	191.0	274.0	191.0
Nitrate + Nitrite Nitrogen	13	13	1.05	1.46	0.30	0.20	2.20	5.20	0.90	1.10	2.20	5.20	2.20	5.20
Total Kjeldahl Nitrogen	13	13	2.20	2.25	1.00	0.80	4.00	3.60	2.20	2.20	4.00	3.60	4.00	3.60
Oil & Grease	10	N/A	13.0	N/A	1.0	N/A	80.0	N/A	5.0	N/A	80.0	N/A	80.0	N/A
Total Phosphorus	13	13	0.44	0.26	0.06	0.06	1.57	0.90	0.25	0.10	1.57	0.90	1.57	0.90
Total Suspended Solids	13	13	242	107	11	12	916	260	50	99	916	260	916	260

Results of summarized grab samples revealed the pH minimum was 6.0 standard units and the maximum was 7.9 standard units.
[1] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

The following discussion describes those pollutants expected to be present and provides a rudimentary analysis of whether they have the potential to be present at benchmark levels in the storm water discharges from timber product facilities.

• *Arsenic*—Arsenic may be found in storm water discharges from wood preservation facilities that use waterborne organic salts containing arsenic such as CCA. There are a number of different avenues by which wood preserving wastes may contaminate storm water. These may include spills, leaks, and drips from equipment and tanks; lumber washing to remove excess preservative; fugitive emissions and emergency releases from the process; and kick back from the lumber being stored.

The analysis performed on part 2 storm water group permit application data included results from 27 grab and 22 composite samples. The maximum concentration of these samples was 0.2 mg/L. These data were the analytical results primarily from wood preserving facilities. The lack of data for this pollutant requires that additional monitoring be performed at wood preserving facilities with chromium-copper-arsenic formulations.

• *Biochemical Oxygen Demand (5–Day)*—BOD_5 is the measure of the oxygen demand caused over 5 days by the biochemical degradation of organic material and the oxidation of forms of nitrogen.[38] BOD_5 is expected to be discharged from all timber processing facilities due to the potential for leachate generation in wood residuals, discharge of organic wood residuals themselves, and the discharge of other organic wastes and pollutants.

The analysis performed on part 2 storm water group permit application data included results from 198 grab and 200 composite samples. Storm water discharges from timber product facilities showed relatively high levels of BOD_5. Sample results showed 28 percent of the composite and 25 percent of the grab sample were above a concentration of 30 mg/L. The data indicate that BOD_5 is a parameter of concern.

• *Benzene, Toluene, and Xylene*—Volatile organic solvents, principally naphtha and Stoddard solvent are expected to be found at facilities using pentachlorophenol as a preservative. Wood preserving facilities using pentachlorophenol most often use pentachlorophenol and solvent formulations.[39] Generally, these solvents are composed of benzene, toluene, and xylene.[40] Other solvents are also used onsite for equipment maintenance and for finished products.

Timber product facilities in general did not report these pollutants as expected to be in their discharge. Analytical results with concentrations of 0.037 mg/L and 0.038 mg/L were submitted for a grab and a composite sample for toluene, respectively. Analytical results for xylene, with concentrations of 0.055 mg/L and 0.051 mg/L, were submitted for a grab and a composite sample, respectively.[41] No data were submitted for benzene. Although these pollutants may be present, pentachlorophenol is a better indication of pollution problems at these sites. Therefore, monitoring of these specific pollutants will not be required.

• *Chemical Oxygen Demand (COD)*—COD is the measure of the content of organic matter which will oxidize in a strong acid (purportedly 95–100 percent).[42] High COD concentrations have been found to result from creosote and pentachlorophenol operations.[43] Part 2 storm water group permit application data included results from 198 grab and 198 composite samples. Storm water discharges from timber product facilities were found to have relatively high concentrations of COD. Forty-three percent of the composite and 44 percent of the grab sample results were above 150 mg/L. These data indicate that COD is a parameter of concern throughout the timber product industry.

• *Copper*—Copper is commonly found at wood preserving facilities which use inorganic salts such as CCA, ACC, ACA. Part 2 storm water group permit application data included results from 26 grab and 25 composite samples. The maximum concentration of these samples was 0.16 mg/L. Primarily these data, including the maximum concentration, were reported by wood preserving facilities. Additional monitoring will be required to characterize storm water discharges from wood preserving sites that use chromium-copper-arsenate formulations.

• *Total Kjeldahl (Ammonia and Organic) Nitrogen and Total Oxidized (nitrate and nitrite) Nitrogen*—Nitrogenous components may also be found in the storm water from facilities classified under SIC Major Code 24. For example, ammonia may be found in storm water discharges from wood preserving activities, as it is a component of ammonium copper arsenate (ACA). Nitrogen is also a pollutant associated with the use of fertilizers which are also used on these sites.

[38] "Standard Methods for the Examination of Water and Wastewater, 17th Edition," APHA/AWWA/WPCF, 1989.

[39] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

[40] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[41] Part 2 Storm Water Group Permit Application Data Summaries.

[42] "Standard Methods for the Examination of Water and Wastewater, 17th Edition," APHA/AWWA/WPCF, 1989.

[43] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

Out of 188 composite samples used in this analysis for TKN, 95 percent had concentrations of TKN less than 7.5 mg/L. Out of 188 grab samples, 95 percent had concentrations less than 9.26 mg/L. Concentrations from total oxidized nitrogen were found to be relatively low. A review of the data contained in part 2 storm water group permit applications for timber product facilities revealed that only 15 percent of these data were above concentrations of 1 mg/L.[44] Monitoring for these parameters will not be required, as nitrogenous compounds are not expected to be a problem at timber product facilities.

• *Oil and Grease*—Oil and grease is an aggregate compound that includes thousands of compounds of varying toxicities and toxic modes.[45] High oil and grease concentrations result from creosote and pentachlorophenol operations. However, oil and grease can be found at virtually all operations under SIC Major Code 24 as a result of the use of petroleum products from the utilization, maintenance and storage for equipment and vehicles.

A review of the data contained in part 2 storm water group permit applications for timber product facilities revealed that only 13 percent of these data were above concentrations of 15 mg/L.[46] The high levels experienced by several of these facilities were considered by EPA to be atypical of those experienced by the majority of timber product facilities.

• *Pentachlorophenol/Phenolic Compounds*—Pentachlorophenol is the primary wood preserving chemical in the U.S. today. In the past, pentachlorophenol was also the primary component of surface protection chemicals. However, due to proposed waste listing of surface protection pentachlorophenol wastes at surface protection facilities, alternatives to pentachlorophenol are currently more predominant.

No data were submitted in part 2 storm water group permit applications for the parameter pentachlorophenol, however, data were submitted for the phenolic compounds. Phenol, chlorophenols, nitrophenols, and pentachlorophenol can be measured as the aggregate compound—phenols (also known as phenolic compounds). These chemicals can be found at plants using pentachlorophenol and creosote wood preservatives and from plants using a commercial pentachlorophenol mixture as part of surface protection.[47]

The analysis performed on part 2 storm water group permit application included results for 10 composite samples and 35 grab samples. The maximum concentration of these samples was 0.399 mg/L. Data for individual phenolic compounds were not submitted to EPA. Monitoring for this pollutant should be continued in order to characterize sites using these formulations.

• *pH*—pH is a measure of the acidity or alkalinity of a discharge. The pH parameter can be impacted as a result of most every operation conducted under SIC Major Code 24. For example, discharges of storm water from decaying wood and wood residues, and in some cases decomposing wood products will result in low pH concentrations. Spills, drips, and leaks of chemicals associated with wood surface protection and preserving operations may also lower pH. EPA studies indicate that pH concentrations in process solutions typically range from 4.1 to 6.0 s.u. at wood preserving facilities.[48]

The analysis performed on part 2 storm water group permit application data revealed that only 16 percent of these data are outside the range of the typically imposed technology-based pH range of 6.0 s.u. to 9.0 s.u. The levels falling outside this range are considered by EPA to be atypical of those experienced by the majority of the timber product facilities.

• *Phosphorus*—One of the key causes of eutrophication in lakes and estuaries is phosphorus. Contamination of storm water with phosphorus is often associated with use of fertilizers on facility grounds and with the use of detergents for clean up.

A review of the data contained in part 2 storm water group permit applications for timber process facilities revealed that 95 percent of the 199 composite samples taken were below 1.72 mg/L and 95 percent of the 198 grab samples were 2.66 mg/L or below. Only 10 percent of the composite samples and 19 percent of the grab samples have analytical values above 1.0 mg/L. The high levels experienced by these facilities are considered by EPA to be atypical of those experienced by the majority of the timber product facilities and therefore monitoring will not be required.

• *Total Suspended Solids*—TSS is the measure of organic and inorganic suspended materials within water.[49] TSS may result from every operation conducted under SIC Major Code 24. Wood fibers, wood particulates, and eroded sediment potentially are the greatest contributors to TSS for timber processing facilities.

The analysis performed on part 2 storm water group permit application data included TSS results from 198 grab and 198 composite samples. EPA has determined that storm water discharges from timber product facilities have benchmark levels for TSS. Sixty-seven percent of the composite and 67 percent of the grab sample results were above a concentration of 100 mg/L; 55 percent of the composite and 53 percent of the grab sample results were above a concentration of 200 mg/L. Monitoring for this parameter will be conducted at all facilities performing wood preservation and/or surface protection.

• *Zinc*—Zinc may be found at wood preserving plants as a result of the use of CZC inorganic salt preservatives. CZC is used at 3 percent of the facilities which conduct inorganic salt wood preservation.[50]

Part 2 storm water group permit application data included results for 16 grab and 15 composite samples. No data for zinc were provided specifically by wood preserving facilities. Monitoring, therefore, will not be required.

5. Options for Controlling Pollutants

There are three options for controlling pollutants at timber products facilities: source reduction, best management practices (BMPs), and/or end-of-pipe treatment. In evaluating the options for controlling pollutants in discharges of storm water associated with industrial activity, EPA must provide for compliance with the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) requirements of Section 402(p)(3) of the Clean Water Act. The variabilities in both the industrial activities performed on a specific site and the storm water discharges from timber product facilities, coupled with the lack of sufficient characterization data make it

[44] Part 2 Storm Water Group Permit Application Data Summaries.

[45] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[46] Part 2 Storm Water Group Permit Application Data Summaries.

[47] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[48] "Development Document for Effluent Limitations Guidelines and Standards for the Timber Products Point Source Category, Final (EPA 440/1–81/023)," EPA, Effluent Guidelines Division, January 1981.

[49] "Standard Methods for the Examination of Water and Wastewater, 17th Edition," APHA/AWWA/WPCF, 1989.

[50] "Background Document Support the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.

infeasible to develop effluent limitations at this point in time. EPA believes that enabling the owner/operator of the facility to develop BMPs based on site-specific factors such as facility size, industrial activities performed, climate, geographic location, geology/hydrology and the environmental setting of each facility will provide the flexibility needed to address appropriate controls to meet the BAT/BCT requirements. Development of a storm water pollution prevention plan that addresses exposure minimization BMPs, will be required for all facilities that discharge storm water from timber product facilities. EPA believes that exposure minimization BMPs will provide appropriate levels of control for pollutants in storm water discharges while allowing relatively inexpensive BMPs to be implemented. In some instances, however, more labor and resource intensive structural controls such as sedimentation ponds may be appropriate. EPA believes that the BMPs discussed below will help provide a sufficient level of control for the types of pollutants found in discharges associated with timber product facilities.

In developing these industry-specific BMPs both the part 1 application data for facilities that sampled were reviewed, as well as industry-specific literature sources. The BMPs provided are separated into those most appropriate for certain areas of a site where pollutants may be released such as: log, lumber, and other wood product storage areas; residue storage areas; loading and unloading and material handling areas; chemical storage areas; and equipment/vehicle maintenance, storage and repair areas. These types of activities can be found at all types of timber product facilities. Table A–3 provides a summary of the effective practices for the control of pollutants for all timber product facilities.

TABLE A–3.—EFFECTIVE POLLUTANT CONTROL OPTIONS FOR ALL TIMBER PRODUCT FACILITIES

Activity	Associated BMPs
Log, Lumber, and Other Wood Product Storage Areas	Divert storm water around storage areas with ditches, swales and/or berms.
	Locate storage areas on stable, well-drained soils with slopes of 2–5 percent.
	Line storage areas with crushed rock or gravel or porous pavement to promote infiltration, minimize discharge and provide sediment and erosion control.
	Stack materials to minimize surface areas of materials exposed to precipitation.
	Practice good housekeeping measures such as frequent removal of debris.
	Provide collection and treatment of runoff with containment basins, sedimentation ponds and infiltration basins.
	Use ponds for collection, containment and recycle for log spraying operations.
Residue Storage Areas	Locate stored residues away from drainage pathways and surface waters.
	Avoid contamination of residues with oil, solvents, chemically treated wood, trash, etc.
	Limit storage time of residues to prevent degradation and generation of leachates.
	Divert storm water around residue storage areas with ditches, swales and/or berms.
	Assemble piles to minimize surface areas exposed to precipitation.
	Spray surfaces to reduce windblown dust and residue particles.
	Place materials on raised pads of compacted earth, clay, shale, or stone to collect and drain runoff.
	Cover and/or enclose stored residues to prevent contact with precipitation using silos, van trailers, sheds, roofs, buildings or tarps.
	Limit slopes of storage areas to minimize velocities of runoff which may transport residues.
	Provide collection and treatment of runoff with containment basins, sedimentation ponds and infiltration basins.
Loading and Unloading and Material Handling Areas	Provide diversion berms and dikes to limit runon.
	Cover loading and unloading areas.
	Enclose material handling systems for wood wastes.
	Cover materials entering and leaving areas.
	Provide good housekeeping measures to limit debris and to provide dust control.
	Provide paved areas to enable easy collection of spilled materials.
Chemical Storage Areas	Provide secondary containment around chemical storage areas.
	Provide fluid level indicators.
	Inventory of fluids to identify leakage.
	Locate storage areas away from high traffic areas and surface waters.
	Develop spill prevention, containment and countermeasure (SPCC) plans and implement.
	Cover and/or enclose chemical storage areas.
	Provide drip pads to allow for recycling of spills and leaks.

Sources:
NPDES Storm Water Group Application—Part 1. Received by EPA March 18, 1991, through December 31, 1992.
"Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.

"Background Document Supporting the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.
"Chlorophenate Wood Protection, Recommendations for Design and Operation," Environment Canada, December 1983.
Wood Preserving; Identification and Listing of Hazardous Wastes; Final Rule, "Federal Register," Volume 55, No. 235, December 6, 1990.
Selected pages from "Texas Best Management Practices for Silviculture," Texas Forestry Association, 1989. Submitted for inclusion by American Pulpwood Association, Washington, D.C.

Wood surface protection and preserving facilities should consider additional controls for their storm water discharges because of the types of pollutants which may contaminate the discharges. Therefore, Table A–4 contains a summary of effective practices for the control of pollutants from timber product facilities that treat their wood. These BMPs to be used in conjunction with those BMPs in Table A–3.

TABLE A–4.—ADDITIONAL EFFECTIVE POLLUTANT CONTROL OPTIONS FOR TIMBER PRODUCT FACILITIES THAT SURFACE PROTECT OR PRESERVE

Activity	Associated BMPs
Wood surface protection and preserving activities	Extend drip time in process areas before moving to storage areas. Pave and berm areas used by equipment that has come in contact with treatment chemicals. Dedicate equipment that is used for treatment activities to that specific purpose only to prevent the tracking of treatment chemicals to other areas on the site. Locate treatment chemical loading and unloading areas away from high traffic areas where tracking of the chemical may occur. Provide drip pads under conveyance equipment from treatment process areas. Provide frequent visual inspections of treatment chemical loading and unloading areas during and after activities occur to identify any spills or leaks needing clean-up. Cover and/or enclose treatment areas. Provide containment in treated wood storage areas. Cover storage areas to prevent contact of treated wood products with precipitation. Elevate stored, treated wood products to prevent contact with runon/runoff.

Sources:
NPDES Storm Water Group Application—Part 1. Received by EPA March 18, 1991 through December 31, 1992.
"Regulatory Guidance and Waste Reduction Manual for United States Sawmills (Draft)," EPA Office of Solid Waste, January 12, 1993.
"Background Document Supporting the Proposed Listing of Wastes From Wood Preservation and Surface Protection Processes," EPA Office of Solid Waste, July 1987.
"Chlorophenate Wood Protection, Recommendations for Design and Operation," Environment Canada, December 1983.
Wood Preserving; Identification and Listing of Hazardous Wastes; Final Rule, "Federal Register," Volume 55, No. 235, December 6, 1990.
Selected pages from "Texas Best Management Practices for Silviculture," Texas Forestry Association, 1989. Submitted for inclusion by American Pulpwood Association, Washington, D.C.

Control of sediments leaving the site should also be considered by timber product facilities as sediments contribute to the total suspended solids in the storm water discharges. There are several areas of the site that may be prone to erosion due to intense industrial activities. These areas are: Loading and unloading areas, access roads, material handling areas, storage areas, and any other areas where heavy equipment and vehicle use is prevalent. Specific erosion and sediment controls should be implemented to minimize the discharge of sediments from the site. Measurements that timber facilities may consider include, but are not limited to: stabilization measures such as seeding, mulching, chemical stabilization, sodding, soil retaining measures and dust control and structural measures such as sediment traps, contouring, sediment basins, check dams and silt fences.

6. Special Conditions

a. Prohibition of non-storm water discharges. This permit authorizes an additional non-storm water discharge specific to the timber products industry that, when combined with storm water, is authorized to be discharged under this permit. To be authorized under the permit, the sources of non-storm water must be identified in the storm water pollution prevention plan prepared for the facility. Where these discharges occur, the plan must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water components of the discharge. Authorized discharges include the following: spray down of lumber and wood product storage yards.

Spray down of lumber and wood product in storage yards is intermittently performed for fire control and pest control. Discharges from spray down activities are not storm water discharges; however, resulting discharges created as a result of spray down of raw lumber and wood product storage yards are authorized under this section where no chemical additives are used in the spray down waters and no chemicals are applied to the wood during storage. EPA believes that this practice, when performed in compliance with the terms and conditions of this section, will not pose any additional risks to human health and the environment because it is an industrial activity which is performed intermittently and within the confines of an area that should already contain controls for pollutants in storm water discharges.

It should be noted that the following discharges are not authorized under this section:

- Noncontact cooling wastewater.
- Contact cooling wastewater.
- Boiler blowdown and water treatment wastewater.

• Storm water from areas of surface protection hand spraying activities.

This prohibition of unpermitted non-storm water discharges ensures that these discharges are not inadvertently covered under this section and requires the permittee to submit the appropriate applications to gain coverage for the non-storm water portion of the discharge.

7. Storm Water Pollution Prevention Plan Requirements

Several additional storm water pollution prevention plan requirements are added in the section of today's proposed permit for the timber products industry. These deal with the identification and description of potential pollutant sources, and requirements to meet specific good housekeeping, inspection, and sediment/erosion control measures. EPA is also recommending that several criteria be considered during the development of the storm water pollution prevention plan.

a. Contents of the Plan

(*1*) *Description of Potential Pollutant Sources.* (*a*) *Drainage*—There are no additional requirements beyond those described in Part VI.C.2.a. of this fact sheet.

(*b*) *Inventory of exposed materials*—This section will require those facilities that have conduced activities associated with wood preserving and wood surface protection with pentachlorophenol formulations, creosote formulations, or arsenic/chromium formulations in the past to identify: areas where soils are contaminated, treatment equipment, and/or stored materials which remain as a result of these operations. This section will also require the identification of any management practices being employed to minimize the contact of these materials with storm water runoff.

EPA has added these requirements because it is aware through studies performed for the hazardous waste listing process that sites where wood surface protection and wood preserving chemicals have been used in the past continue to contribute pollutants to the storm water discharges that come in contact with them, even once the industrial activity has ceased.[51] In particular, soils that have been contaminated with the formulation, equipment such as dipping tanks and those used for material handling, and wastes and materials that are still stored on the site may continue to release pollutants. EPA is requiring the facility to identify these pollutant sources so that appropriate controls can be implemented.

During the EPA process to list wastes from wood preservation and surface protection processes, data were gathered that showed that the concentration of constituents (of the treatment chemicals) in storm water runoff, in some instances, were equivalent to those concentrations found in process wastewaters. These studies also found high concentrations of phenolic compounds, pentachlorodifluron and phenanthrenes, and metals in soils contaminated with process residuals at several sites. These concentrations were attributed to treated wood drippage and precipitation washoff of treated woods.[52]

For facilities that have operated wood preserving and chlorophenolic surface protection activities in the past, EPA is requiring a complete evaluation of the history of operations since the facility's inception. EPA is requiring this evaluation because soils that are contaminated by treatment chemicals and wastes continue to be a source of pollutants and can contribute to the contamination of storm water runoff indefinitely.

(*c*) *Non-storm water discharges*—There are no additional requirements beyond those described in Part VI.B.2.d. of this fact sheet.

(*d*) *Risk identification and summary of potential pollutant Sources*—There are not additional requirements beyond those described in Part VI.C.2.f. of this fact sheet.

(*2*) *Measures and controls.* As contained in Part VIII.A.5. of this fact sheet, EPA has set forth a number of options which are effective in controlling releases of pollutants to storm water discharges associated with industrial activity. Due to the success of BMPs as a cost effective method of pollution control, EPA is requiring that all facilities consider the implementation of BMPs in the following areas of the site: log, lumber and other wood product storage areas; residue storage areas, loading and unloading areas; material handling areas; chemical storage areas; and equipment/vehicle maintenance, storage and repair areas. The conditions of this section also require facilities that surface protect and/or preserve wood products to address specific BMPs for wood surface protection and preserving activities.

EPA believes it is appropriate to require that permittees indicate in their storm water pollution prevention plan all potential sources of pollution. Effective pollution control measures are currently being implemented at timber product facilities and/or are identified in literature sources specific to timber products facilities. Additional practices may also be found in the "Storm Water Management for Industrial Activities, Developing Pollution Prevention and Best Management Practices" (EPA 832–R–92–006), EPA, September 1992. The determination of the appropriateness or inappropriateness of a measure must be indicated in the facility's storm water management plan.

(*a*) *Good housekeeping*—In addition to typical good housekeeping measures that require the maintenance of areas which may contribute pollutants to storm water in a clean and orderly manner, the pollution prevention plan must specifically address good housekeeping measures and the specific frequency of performance of these measures which are designed to: (1) Limit the discharge of wood debris; (2) Minimize the leachate generated from decaying wood materials; and (3) minimize the generation of dust.

EPA has specified that BMPs limit the discharge of solids because storm water discharges containing TSS and BOD_5 are prevalent at timber products facilities and can often be controlled by good housekeeping measures.

(*b*) *Preventative maintenance*—This section requires periodic removal of debris from ditches, swales, diversion, containment basins, and infiltration measures. The discharge of solids at timber product facilities may inhibit the performance of storm water controls if they are not maintained properly.

(*c*) *Spill prevention and response procedures*—This section requires the development of schedules for response procedures to limit the tracking of spilled materials to other areas of the site. Specifically, this section requires that leaks or spills of wood surface protection or preservation chemicals be cleaned up immediately.

Requirements have been placed in this section to limit the tracking of significant materials that have been leaked or spilled on the site from containers, facility equipment, or onsite vehicles. Of particular concern is the tracking of leaks or spills of treatment chemicals outside near where storm water controls are in place. This may occur, for example, during the filling of storage tanks. Vehicles or equipment used to transfer materials may come into

[51] "Background Document Supporting the Proposed Listing of Wastes from Surface Protection Processes, Part One Final Engineering Analysis Volume 1," EPA Office of Solid Wastes, February 1993.

[52] "Background Document Supporting the Proposed Listing of Wastes from Surface Protection Processes, Part One Final Engineering Analysis Volume 1," EPA Office of Solid Wastes, February 1993.

contact with any materials spilled during the filling or emptying of tanks. As the vehicles move to other locations at the site, such material may be tracked and eventually lead to contamination of storm water discharges.

(*d*) *Inspections*—Inspections must be performed monthly at processing areas, transport areas, and treated wood storage areas of facilities performing wood surface protection and preservation activities. Monthly inspections are designed to assess the usefulness of practices in minimizing drippage of treatment chemicals on unprotected soils and in areas that will come in contact with storm water discharges. BMPs and all other areas of the facility must be visually inspected once per quarter. In addition, all timber products facilities must conduct daily inspections of material handling activities and unloading and loading areas whenever industrial activities occur in those areas.

(*e*) *Employee training*—There are no additional requirements beyond those listed in Part VI.C.3.e. of this fact sheet.

(*f*) *Sediment and erosion control*—This section requires that the following areas of the plant be considered for sediment and erosion controls: loading and unloading areas, access roads, material handling areas, storage areas, and any other areas where heavy equipment and vehicle use is prevalent. Sediment and erosion controls include: Stabilization measures such as seeding, mulching, chemical stabilization, sodding, soil retaining measures; and dust control and structural measures such as sediment traps, contouring, sediment basins, check dams, and silt fences. This requirement is added because part 2 storm water group permit application data showed that many of the sites were discharging high TSS concentrations in their storm water discharges. Identifying those areas of the site where erosion occurs will aid the permittee in determining appropriate BMPs that will achieve a reduction in TSS loadings.

(*g*) *Storm water management*—There are no additional requirements beyond those described in Part VI.C.3.h. of this fact sheet.

(*3*) *Comprehensive site compliance evaluation.* There are no additional requirements beyond those described in Part VI.C.4. of this fact sheet.

8. Monitoring and Reporting Requirements

a. Analytical monitoring requirements for all facilities performing wood preservation and/or surface protection activities. EPA believes that facilities engaged in wood preservation and surface protection may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires facilities engaged in wood preservation and surface protection to collect and analyze grab samples of their storm water discharges for the pollutants listed in Tables A–5, A–6, and A–7. The pollutants listed in Tables A–5, A–6, and A–7 were found to be above benchmark levels for a significant portion of facilities engaged in wood preservation and surface protection that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from facilities engaged in wood preservation and surface protection, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from facilities engaged in wood preservation and surface protection must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Tables A–5, A–6, and A–7. If the permittee collects more than four grab samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE A–5.—MONITORING REQUIREMENTS FOR ALL FACILITIES PERFORMING WOOD PRESERVATION AND/OR SURFACE PROTECTION

Pollutant of concern	Cut-off concentration
Chemical Oxygen Demand (COD)	65.0 mg/L
Total Suspended Solids (TSS)	100 mg/L
Biochemical Oxygen Demand	9.0 mg/L

In addition, those facilities that currently use chlorophenolic formulations for wood preserving or surface protection, or that have used chlorophenolic formulations for surface protection in the past, must monitor for the following parameters:

TABLE A–6.—ADDITIONAL MONITORING REQUIREMENTS FOR FACILITIES PERFORMING WOOD PRESERVATION WITH CHLOROPHENOLIC FORMULATIONS

Parameter of concern	Cut-off concentration
Pentachlorophenol	Detection limit.

Facilities that use chromium-copper-arsenic formulations for the preservation of wood, must monitor storm water discharges associated with the wood preservation, and chemicals and preserved wood product storage for the following additional parameters:

TABLE A–7.—ADDITIONAL MONITORING REQUIREMENTS FOR FACILITIES PERFORMING WOOD PRESERVATION WITH CHROMIUM-COPPER-ARSENIC FORMULATIONS

Parameter of concern	Cut-off concentration
Arsenic, total recoverable	0.000018 mg/L
Copper, total recoverable	0.009 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Tables A–5, A–6, and A–7, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Tables A–5, A–6, and A–7, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE A–8.—SCHEDULE OF MONITORING

2nd year of permit coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in tables A–5, A–6, and A–7, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in tables A–5, A–6, and A–7, then no further sampling is required for that parameter.
4th year of permit coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in tables A–5, A–6, and A–7. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Tables A–5, A–6, and A–7 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Tables A–5, A–6, and A–7. Facilities that achieve average discharge concentrations which are less than or equal to the values in Tables A–5, A–6, and A–7 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, and significant materials from past industrial activity that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at all timber products facilities. The inspection must be a grab sample

collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the final NPDES general permits for storm water discharges. These notices set out requirements for semiannual monitoring for several parameters from wood product facilities involved in wood preserving and surface protection. These notices specifically required that facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities were required to monitor their storm water discharges for oil and grease, pH, COD, and TSS. Facilities engaged in the use of chlorophenolic formulations were required to additionally monitor for pentachlorophenol and acute toxicity. Those engaged in the use of creosote formulation were required to additionally monitor for acute toxicity. Those engaged in the use of waterborne salt formulations, specifically chromium-arsenic formulations, were required to additionally monitor for total recoverable arsenic, total recoverable chromium, and total recoverable copper. Today's proposed permit contains similar monitoring requirements. EPA requests comment on the proposed changes in monitoring requirements for facilities engaged in wood preservation and surface protection.

9. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.A.8. of this fact sheet.

a. Semiannual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in paragraph VIII.A.9.a.(1) must monitor those storm water discharges identified below at least semiannually (2 times per year) except as provided in VI.C.3. of the permit (Sampling Waiver) and VI.C.4. (Representative Discharge). Permittees with facilities identified in paragraph VIII.A.9.a.(1) (below) must report in accordance with Part VI.B. of the permit (Reporting: Where to Submit) and paragraph VIII.A.9.c.(2) (Reporting: When to Submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Facilities with storm water discharges associated with industrial activity from areas that are used for wood preserving treatment, wood surface protection, storage of treated or surface protected wood and/or residues, treatment equipment storage or treatment chemical storage at any wood preserving or wood surface protection facilities are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L), pH, COD (mg/L), and TSS (mg/L). In addition, facilities that use chlorophenolic formulations shall measure pentachlorophenol (mg/L); facilities that use creosote formulations shall measure acute whole effluent toxicity; and facilities that use chromium-copper-arsenic formulations shall measure total recoverable arsenic (mg/L), total recoverable chromium (mg/L), total recoverable copper (mg/L).

b. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in paragraph XI.A.9.b.(1) (below) must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in VI.C.3. (Sampling Waiver), and VI.C.4. (Representative Discharge). Permittees with facilities identified in paragraph XI.A.9.b.(1) (below) are not required to submit monitoring results, unless required in writing by the Director However, such permittees must retain monitoring results in accordance with Part VII.P.2. of the permit (Retention of Records). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Facilities with storm water discharges associated with industrial activity from areas that are used for log, lumber, and other wood product storage, residue storage areas, loading

and unloading, material handling and chemical storage at timber product facilities that are not wood preserving or wood surface protection facilities are required to monitor such storm water that is discharged from the facility for BOD_5 (mg/L), COD (mg/L), and TSS (mg/L).

(2) Sample type. For all discharges, data shall be reported for a grab sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Reporting: When to submit. (1) Permittees that are required to conduct sampling pursuant to part VIII.A.9.a.(1) (Semiannual Monitoring) shall monitor samples collected during the sampling periods running from January to June and during the sampling period from July to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than 12 months of information.

d. Permittees with facilities identified in part XI.A.9.b.(1) (Annual Monitoring) are not required to submit monitoring results, unless required in writing by the Director.

B. Storm Water Discharges Associated With Industrial Activity From Paper and Allied Products Manufacturing Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from 11 categories of facilities, including paper and allied product manufacturing facilities that are commonly identified by Standard Industrial Classification (SIC) Major Group 26. Today's proposed permit establishes special conditions for the storm water discharges associated with industrial activities at paper and allied product manufacturing facilities. Based on an evaluation of part 1 and part 2 group application data, these facilities were determined to perform similar operations, use similar raw materials, and employ similar material handling and storage practices. In light of the available information, it was determined that the storm water discharge characteristics would be similar for facilities covered by this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

SIC Major Group 26, the production of pulp, paper, and paperboard, is a highly diversified industry group which manufactures a variety of products. Products include newsprint, printing and writing papers, bleached and unbleached packaging paper, glassine, tissue papers, vegetable parchment, greaseproof papers, bleached and unbleached paperboard, special industrial papers, and pulp. Pulp, paper, and paperboard is produced from wood and nonwood products such as jute, hemp, rags, cotton linters, bagasse, and esparto. Secondary fibers, or wastepaper, is also used to produce paper and paperboard. Four standard manufacturing processes are involved in the production of pulp, paper, and paperboard: (1) Raw material preparation, (2) pulping, (3) bleaching, and (4) papermaking.

a. Raw material preparation. Wood is the most widely used raw material for manufacturing pulp and paper products. Wood must be prepared for pulping by log washing, bark removal, and chipping/sawing. These activities are usually conducted outdoors and produce large amounts of wood chips, sawdust, and other wood debris. If exposed to storm water, these activities may contribute TSS and BOD_5 to the storm water discharge.

b. Pulping. Pulping involves reducing a cellulosic raw material into a form that may be further processed to produce paper or paperboard, or into a form that may be chemically converted. Two pulping methods are used to reduce the raw material: mechanical pulping and chemical pulping.

Mechanical pulping, also known as groundwood pulping, uses two processes to produce pulp, stone groundwood and refiner groundwood. Stone groundwood uses a grindstone to tear fiber from the side of short logs. Refiner groundwood passes wood chips through a disc refiner. In both processes, wood may be softened with chemicals or heat to reduce the amount of energy required for grinding. Mechanical pulp is very suitable for use in newspapers, catalogs, tissues, and one-time publications.

Chemical pulping, using cooking chemicals under controlled conditions, produces a variety of pulps for multipurposes. This process generally produces high quality paper products. Three types of chemical pulping are used: alkaline, sulfite, and semichemical.

Alkaline pulping, more commonly known as the kraft process, produces a very strong pulp and is adaptable to almost all wood species. The pulp is formed by boiling wood chips in an alkaline solution usually containing sodium sulfate. Alkaline pulping also provides for the successful recovery of chemicals used in the process. This pulping technique is the most highly used pulping process worldwide.

Sulfite pulps are generally prepared from softwoods and produce various types of paper including tissue paper and writing paper. Wood chips are boiled with calcium-based chemicals, magnesium-based chemicals, or ammonia-based chemicals. Calcium was the original the sulfite liquor base, however the spent liquor from this base was difficult and expensive to recover. Many sulfite mills have now been converted to the kraft process or have been shut down because of the problems of chemical recovery and the reduced availability of softwoods.

Semichemical pulping involves the cooking of wood chips from hardwoods with a neutral or slightly alkaline

sodium sulfite solution. Both sodium and ammonia-based chemicals are used in this process. Pulps produced from semichemical pulping are used in the manufacture of corrugated paperboard. Semichemical pulping mills practice chemical recovery from the waste liquor by balancing the pH of the waste liquor. Spent liquor is then burned in a furnace.

Some facilities use secondary fibers to produce the paper products. Secondary fibers are wastepapers and may be used with little or no preparation depending on their condition. The wastepaper may be blended directly with the virgin pulps or may have to be screened and filtered to remove dirt before being added to the pulp.

Some secondary fibers must be deinked before use. In order to reclaim a useful pulp, all noncellulosic materials, such as ink, fillers, and coatings, must be removed. This process uses detergents and solvents to remove these materials. The detergents and solvents may be stored in an area exposed to storm water.

c. Bleaching. After pulping, the pulp is brown or deeply colored. The color results from the presence of lignins and resins or residue from spent cooking liquor. The pulp must be bleached to produce a light colored or white product.

A brightness scale ranging up to 100 (the brightest) is used to determine the degree of bleaching needed. For example, newspaper and food containers do not need a high degree of brightness so semibleached pulps are used. For white paper products, fully-bleached pulps are used. A bleaching sequence is followed in which specific chemicals are sequentially added. The following sequence may be used in bleaching:

- Chlorination and washing.
- Alkaline extraction and washing.
- Chlorine dioxide addition and washing.
- Alkaline extraction and washing.
- Chlorine dioxide addition and washing.

The sequence may be modified to meet specific bleaching requirements. In general, less bleaching is required for mechanical pulps because they contain all of the wood substrate and would require massive amounts of bleaching. Therefore, mechanical pulps are used to produce lower quality paper products, such as telephone directories, newsprint, and disposable products. Chemical pulps may be brightened to a higher degree. Hydrosulfite, hypochlorite, chlorine, oxygen, and peroxides are used in bleaching and may be stored in areas exposed to storm water.

d. Papermaking. After pulps have been bleached, further mixing and blending may be necessary and noncellulosic materials may be added to prepare the pulp for the papermaking stage. Different types of pulp may be blended for desired effects. Softwood pulps are very strong and are used to make high strength, tear resistant paper. These pulps may be blended with hardwood pulps which add porosity, opacity, and printability qualities to the paper. Other materials may be added to the pulp such as clay, talc, or calcium carbonate to improve the texture, brightness, or opacity of the paper. By adding resin or starch, the paper becomes more ink or water resistant. Each of these additives may be a source of contamination for storm water if stored outdoors.

After noncellulosic materials have been blended with the pulp, it is ready for papermaking. The mixture of pulp and additives is called a pulp furnish. In making paper, fiber from a dilute pulp furnish is placed on a fine screen, called a wire. The water is drained through, and the fiber layer is removed, pressed and dried.

Two basic types of processes are used in papermaking: the cylinder machine and the Fourdrinier. The cylinder machine has wire cylinders which rotate in the dilute pulp furnish and collect fibers. The cylinders deposit the collected fibers on a moving felt to form a fibrous sheet. In the Fourdrinier process, the dilute pulp furnish is placed on a continuous wire belt where the fibrous sheet is formed. The cylinder machine is usually associated with the manufacturing of heavy grades of paper and paperboard; the Fourdrinier process is mostly used for producing paper, but may also be used to make paperboard.

The pressing and drying operations are similar for the two processes. After the fibrous sheet is formed, it is transferred to two or more presses to remove water and enhance smoothness and density. The sheet is then dried by being passed through heated hollow iron or steel cylinders. For a smoother finish, the sheet may be passed through a series of rollers (calendaring) used to produce high density paper.

After the sheet is dry, coatings may be applied to increase appearance, printability, water resistance, or texture. Coatings consist of a high density water slurry of pigments and adhesives that are blended together. Mixtures of starches, latices, polyvinylacetate, and recoverable solvents are used depending on the purpose of the coating. The coating is applied using rolls, air knives, blades, or metering rods. High gloss and smoothness is achieved by using high speed rollers with alternating steel and fabric-filled rolls. The coatings, when stored exposed to storm water discharges may be a source of contamination.

e. Wastewater treatment. Most pulp, paper, and paperboard facilities have onsite wastewater treatment systems for treating process wastewater, although some facilities may discharge to a POTW. To reduce BOD_5 and TSS loads, many facilities use biological treatment. The most common treatment process is aerated stabilization. At nonintegrated facilities (facilities that do not produce pulp) and secondary fibers facilities, however, primary treatment may be the only method used. At these facilities, primary treatment is usually very effective in reducing BOD_5.

f. Activities contributing to storm water contamination. Although there is diversity among the types of final products produced at pulp, paper, and paperboard facilities, several industrial activities are common to all. These activities are presented in Table B–1 below.

TABLE B–1.—COMMON INDUSTRIAL ACTIVITIES AT PAPER AND ALLIED PRODUCT MANUFACTURING FACILITIES

Industrial activities
Bactericide use
Baghouse, cyclone, dust collectors
Coating
Corrugate
Creasing
Cutting
Equipment storage
Vehicle fueling
Gluing
Rail and Truck loading areas
Material handling sites
Printing
Access Railroads
Scoring
Stitching
Storage areas
Taping

Typical activities performed at pulp, paper, and paperboard facilities include log washing, chipping and cutting of logs, log sorting, log storage, and loading and unloading of logs onto trucks or railroad cars for transport to other facilities. These log storage and handling activities may contribute bark and wood debris, TSS, and leachates to a storm water discharge. Leachates from the decay of wood products may contain high levels of TSS and BOD_5.

Many of the facilities in SIC Major group 26 employ the use of material handling equipment (forklifts, loaders, vehicles, chippers, debarkers, cranes,

etc.), vehicles, and other machinery. These facilities store the equipment onsite and may also engage in equipment maintenance and repair activities. These types of activities are performed in either covered or outdoor areas of the facility. Associated with these activities is the storage of significant materials such as petroleum products and other maintenance fluids such as fuels, motor oils, hydraulic oils, lubricant fluids, brake fluids, and antifreeze. When exposed to storm water, these materials may cause contamination of a storm water discharge.

The manufacturing processes at paper and allied product manufacturing facilities are not typically exposed to storm water. Because of the lack of industrial activities occurring outdoors, the primary sources of storm water pollutants originate from materials handling, storage of materials, and waste management or disposal activities. Sources of pollutant are most often from spills and leaks of materials at loading and unloading areas, storage areas, and waste disposal areas. Table B–2 lists the materials that may be exposed to storm water at paper and allied product manufacturing facilities.

TABLE B–2.—COMMON SIGNIFICANT MATERIALS AT PAPER AND ALLIED PRODUCT MANUFACTURING FACILITIES

Significant materials onsite
Solvents
Glues
Fuels
Oils
Lubricants
Alcohol
Starch
Wooden pallets
Paper rollstock
Waxes
Air emissions from solvent recovery processes
Baled waste paper
Dyes
Inks
Ammonia
Biocides
Miscellaneous materials removed during pulping
Final products
Adhesives
Paper wastes
Dust and particulates from cyclones used in paper trim activities, resins/polymers
Clay slurries

2. Pollutants in Storm Water Discharges Associated With Industrial Activity From Paper and Allied Product Manufacturing Facilities

Few pollutants are expected in storm water discharges from the manufacturing of paper and allied products because the majority of industrial activities occur indoors. Pollutants may be present in storm water as a result of outdoor activities associated with the industry such as discharges which come into contact with the following areas of the site: Loading or unloading of materials; outdoor storage of raw materials or unpackaged products; outdoor process activities; dust or particulate generating processes; and illicit connections or inappropriate management practices.

The volume and quantity of storm water discharges associated with industrial activity depend upon a number of factors, including the nature of the industrial activities occurring at the facility, the nature of the precipitation, and the degree of surface imperviousness. Storm water may pick up pollutants from structures and other surfaces as it drains from the facility. Even within a group of facilities with similar activities and materials used, handled, stored, or produced, the quality of the storm water can vary greatly.

The regulatory deadline for submission of the part 2 data was October 1, 1992. Many part 2 data submittals remain incomplete and many of those that did submit data did not identify the significant material or industrial activity that may have contributed the pollutants to the storm water discharge. Tables B–3 and B–4 indicate the statistically summarized sampling data from part 2 group applications. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for the parameters required. The data showed that variations occur amongst the sites covered under SIC Code 26. This is due in fact to the different combinations of industrial activities occurring at each facility.

TABLE B–3.—PART 2 DATA STATISTICS FOR GRAB SAMPLES[1]

Pollutant	Samples	Detects	Mean	Min	Max	Median	95%	99%
BOD_5	121	111	34.7	0.0	1000.0	8.0	115.0	446.0
COD	121	117	191.7	0.0	2200.0	61.0	740.0	1720.0
Nitrate/nitrite Nitrogen	121	115	0.95	0.0	5.2	0.5	3.93	4.97
Total Kjeldahl Nitrogen	121	111	3.8	0.0	89.6	1.76	10.2	38.7
Oil and Grease	120	72	3.7	0.0	61.0	1.0	15.0	35.0
pH	121	121	N/A	3.8	N/A	N/A	N/A	N/A
Total Phosphorus	120	112	0.4	0.0	10.3	0.18	1.1	2.58
TSS	121	112	153	0.0	3390	41	520	2340

[1] All Pollutant values in mg/L, except pH which is in standard units.

TABLE B–4.—PART 2 DATA STATISTICS FOR COMPOSITE SAMPLES[1]

Pollutant	Samples	Detects	Mean	Min	Max	Median	95%	99%
BOD_5	111	100	24.25	0.0	367.0	8.0	93.0	306.0
COD	112	107	133.9	0.0	1486.0	51.0	530.0	1400.0
Nitrate/nitrite Nitrogen	111	106	0.76	0.0	5.6	0.470	2.44	4.08
Total Kjeldahl Nitrogen	112	99	3.17	0.0	64.9	1.770	10.10	23.10
Total Phosphorus	111	104	0.36	0.0	10.8	0.160	0.91	1.25

TABLE B-4.—PART 2 DATA STATISTICS FOR COMPOSITE SAMPLES[1]—Continued

Pollutant	Samples	Detects	Mean	Min	Max	Median	95%	99%
TSS	111	96	44	0.0	761	13	198	550

[1] All pollutant values in mg/L.

The following 5 pollutants; 5-Day Biochemical Oxygen Demand (BOD_5), Chemical Oxygen Demand (COD), pH, Total Suspended Solids, and oil and grease and their potential source are discussed in more detail below.

- *Total Suspended Solids (TSS)*—TSS is a measure of the organic and inorganic solid material suspended in the storm water. TSS may be introduced to storm water in many of the industrial activities performed onsite of paper and allied product manufacturing facilities. The part 2 group applications showed median TSS concentrations of 13 mg/L for composite samples and 42 for grab samples. The fact that the composite samples show a level below the commonly used value in effluent guidelines of below 50 mg/L may indicate that the storm water discharges are not of general concern to this industry as a whole. Implementation of best management practices to limit the discharge of solids at the facilities which show concentrations greater than that level should be sufficient to bring TSS concentrations down to that level. The fact that concentrations in the grab samples were high may be due to the variability that often results during the collection of samples for the TSS analysis.
- *Five-Day Biochemical Oxygen Demand* (BOD_5)—BOD_5 is a measure of the oxygen demand caused over 5 days by the biochemical degradation of organic material and the oxidation of forms of nitrogen. The part 2 group applications showed median BOD_5 concentrations of 8.0 mg/L for composite samples and 8.0 mg/L for grab samples. Potential sources of BOD_5 at these facilities could be leaks and spills of oil and grease, fuels, lubricants, organic chemicals or storage of wood products, waste and final paper products exposed to precipitation. Typical values for BOD_5 show attainable levels below 30 mg/L. The values observed in the applications are relatively low, and are therefore not of concern at the facilities covered under this section.
- *Chemical Oxygen Demand (COD)*—COD is a measure of the content of organic matter which will oxidize in a strong acid. The potential sources of COD in storm water runoff from facilities covered under this section are leaked or spilled fuel, oil or grease from vehicles and other equipment utilized in the material handling and processing facilities, and spilled or leaked solvents and other chemicals. The part 2 group applications showed medium COD concentrations of 51 mg/L for composite samples and 61 mg/L for grab samples. It is expected that these levels may be reduced by the implementation of BMPs such as good housekeeping, inspection, covering of storage areas and loading and unloading areas and other practices.
- *pH*—pH is a measure of a discharge's acidity or alkalinity. The pH of storm water discharges from facilities under this section may be either lowered or increased due to contact with caustic or acidic compounds. Typically, discharges that range between 6 and 9 s.u. are considered protective of aquatic environments. Because few samples had pH values less than 6.0 s.u., pH was determined not to be a pollutant of concern for this industry as a whole.
- *Oil and Grease*—Oil and grease is a gross measure of the amount of petroleum hydrocarbons within a sample. The potential sources of oil and grease at facilities covered under this section may be from leak or spills of fuel, oils, lubricants and other petroleum products used in conjunction with vehicle and equipment maintenance and storage activities. The part 2 group applications used in the evaluations showed median oil and grease concentrations of 1.0 mg/L and a 95 percentile value of 15 mg/L for grab samples. In comparison to the effluent guideline for oil and grease of 15 mg/L applicable to the petroleum refinery point source category [40 Code of Federal Regulations (CFR) part 419], this parameter is not considered to be a pollutant of concern at the facilities covered under this section.

Few toxic pollutants were identified in the part 2 applications as being present in the storm water discharges from paper and allied products. Only four facilities provided data for any toxics and no two facilities reported for the same pollutant. The pollutants reported were metals (copper, lead, iron, manganese, and zinc), 2-butanone, and acetonitrile. It is not expected that these pollutants represent significant contributions to storm water discharges from this industry as a whole.

3. Options for Controlling Pollutants

There are two options for reducing pollutants in storm water discharge; end-of-pipe treatment, and implementing best management practices (BMPs) to prevent and/or eliminate the contact between significant materials and storm water. A comprehensive storm water management program for a given plant may include controls from each of these categories and should be based on a consideration of site and facility plant characteristics. End-of-pipe treatment is effective for the control of process waters when the types of pollutants and the volume of water to be treated is known. However, storm water discharges from any industry, including the paper and allied product manufacturing industry, can be numerous, intermittent, and of various volumes. Therefore, the channelization of storm water that comes into contact with significant materials into a single treatment facility, or construction of numerous treatment devices for each discharge, may be burdensome and ineffective for treating pollutants contained in storm water from these types of facilities. EPA believes that the most appropriate means of storm water management at paper and allied product manufacturing facilities can be sufficiently determined by the operator of the facility.

EPA believes that the most effective storm water management control for limiting the offsite discharge of pollutants in storm water is a combination of passive and active BMPs. Passive BMPs are methods by which discharges of contaminants are controlled with basic maintenance Examples of these types of controls include source reduction diversion dikes, vegetative covers, and berms. Passive practices are typically (but not always) low in cost and relatively easy to implement. Active BMPs may be as simple as good housekeeping or conducting all loading and unloading activities in a designated area. In some instances, more resource intensive types of active BMPs, including sedimentation ponds, may be necessary.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/

hydrology and the environmental setting of each facility, volume and type of discharge generated, and number of outfalls. Each facility will be unique in that the source, type and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with the paper and allied product manufacturing industry.

As part of the group application review process, a review of the part 1 data was analyzed. The applications indicated that numerous BMPs were already being implemented at many of the representative sites. Table B–5 provides the most common practices presently being employed and the relative percentage of facilities who are implementing them. Table B–6 provides an additional list of BMPs that may be appropriate for the industry. Many of the BMPs identified are examples of practices intended to limit the exposure of significant materials and industrial activities to storm water. Facility operators should review their current operations and consider implementing these BMPs if they are applicable to the site and are expected to reduce the discharge of pollutants from the site in storm water.

TABLE B–5.—BEST MANAGEMENT PRACTICES DISCUSSED IN PART 1 GROUP APPLICATIONS [1]

BMP	Percent of facilities
Catch Basins	22.2
Diversion structures around potential contaminants	43.8
Spill Control Procedures, Contingency Plans (SPCC)	67.4
Swales, ditches, trench or graded surfaces	51.4
Employee training	62.5

[1] Material Management Practices were identified in over 20 percent of the 144 facilities in the sampling subset.

TABLE B–6.—SUGGESTED BEST MANAGEMENT PRACTICES AT PULP AND ALLIED PRODUCTS MANUFACTURING FACILITIES

Activity	Suggested BMPs
Outdoor Loading and Unloading	•Confine loading/unloading activities to a designated response and control area. •Avoid loading/unloading materials in the rain. •Cover loading/unloading area/or conduct these activities indoors. •Develop and implement spill plans. •Use berms or dikes around area. •Inspect containers for leaks or damage prior to loading. •Use catch buckets, drop cloths, and other spill prevention measures where liquid materials are loaded/unloaded.
Raw and/or Waste Material Storage Areas	Provide paved areas to enable easy collection of spilled materials. Confine storage to a designated area. •Store materials inside. •Cover storage areas with a roof or tarp. •Use dikes or berms for storage tanks and drum storage. •Cover dumpsters used for waste paper and other materials. •Store materials on concrete pads to allow for recycling and spills or leaks. •Expedite recycling process for exposed scrap paper. •Develop and implement spill plans. •Provide paved areas to enable easy collection of spilled materials. •Provide good housekeeping (i.e., dust and debris collection) where cyclones are utilized.
Log, Lumber and Other Wood Product Storage Areas	•Divert storm water around storage areas with ditches, swales, and/or berms. •Practice good housekeeping measures such as frequent removal of debris. •Line storage areas with crushed rock or gravel or porous pavement to promote infiltration, minimize discharge and provide sediment and erosion control. •Use ponds for collection, containment and recycle for log spraying operations.

4. Special Conditions

There are no requirements beyond those described in Part VI.B. of this fact sheet.

5. Storm Water Pollution Prevention Plan Requirements

There are no requirements beyond those described in Part VI.C. of this fact sheet.

a. Description of potential pollutant sources. There are no requirements beyond those described in Part VI.C. of this fact sheet.

b. Measures and controls. There are no requirements beyond those described in Part VI.C. of this fact sheet.

c. Comprehensive site compliance evaluation. There are no requirements

beyond those described in Part VI.C. of this fact sheet.

6. Numeric Effluent Limitation

There are no effluent limits beyond those described in part VI.F. of this fact sheet.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at paper and allied products manufacturing facilities. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at paper and allied products manufacturing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for paper and allied products manufacturing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in part 2 group applications.

8. Alternative Monitoring

a. Limitations on monitoring requirements. (1) Except as required by paragraph (2) below, there are no requirements for monitoring for storm water discharges associated with the paper and allied products manufacturing industry.

(2) The Director can provide written notice to any facility, otherwise exempt from sampling requirements, that it shall conduct sampling as specified. The Director can provide written notice to require any facility to change the frequency or parameters.

C. Storm Water Discharges Associated With Industrial Activity From Chemical and Allied Products Manufacturing Facilities

EPA regulations define "storm water discharges associated with industrial activity" at 40 CFR 122.26(b)(14) in order to specify those discharges that are required to be permitted under the NPDES program. Category (ii) of this definition includes facilities classified as Standard Industrial Classification (SIC) code 28, Chemical and Allied Products Manufacturing, with the exception of facilities classified as SIC code 285—Paints, Varnishes, Lacquers, Enamels, and Allied Products Manufacturing, which are included in category (xi) of the definition. EPA did not receive any group applications from facilities with primary SIC code 283 (Drugs Manufacturing). Therefore, as EPA had no data on such facilities, they are not eligible for coverage under this section of today's permit. The following section describes facilities covered by part XI.C. of today's proposed permit and the conditions and requirements of facilities covered by part XI.C.

For additional information on the subsectors and their industrial activities, please see the following documents:

- "Development Document for Effluent Limitations Guidelines and Standards for the Paint Formulating Point Source Category." EPA–440/1–79/049–b. 1979.
- "Development Document for Interim Final Effluent Limitations Guidelines for the Pesticide Chemicals Manufacturing Point Source Category." EPA–440/1–75/060d. 1976.
- "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Major Organic Products Segment of the Organic Chemicals Manufacturing Point Source Category." EPA–440/1–74–009a. 1974.
- "Development Document for Effluent Limitations Guidelines, New

Source Performance Standards and Pretreatment Standards for Organic Chemicals and the Plastics and Synthetic Fibers Point Source Category." EPA–440/1–87/009. 1987.

- "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Basic Fertilizer Chemicals Segment of the Fertilizer Manufacturing Point Source Category." 1974.
- "Development Document for Final Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pharmaceutical Manufacturing Point Source Category." EPA–440/1–83/084. 1983.
- "Development Document for Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Inorganic Chemicals Manufacturing Point Source Category, Phase 2." EPA–440/1–84/007. 1984.

1. Discharges Covered Under This Section

Part XI.C. of today's proposed permit has been developed for storm water discharges at facilities primarily engaged in the manufacture of chemicals and allied products. This sector of industry includes facilities which manufacture a broad range of products including plastic and synthetic materials, detergents, paints and varnishes, drugs, fertilizers and pesticides, adhesives, inks, explosives, artist's inks and paints, and organic and inorganic chemicals used for industrial purposes. Specifically, Part XI.C. of today's proposed permit applies to establishments primarily engaged in manufacturing:

a. Industrial inorganic chemicals (SIC 281).

b. Plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other manmade fibers (SIC 282).

c. Soaps and detergents; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; perfumes, cosmetics, and other toilet preparations; glycerin made from vegetable and animal fats and oils (SIC 284).

d. Paints (in paste and ready-mixed form), varnishes, lacquers, enamels, shellac, putties, wood fillers, and sealers, paint and varnish removers, paint brush cleaners, and allied paint products (SIC 285).

e. Industrial organic chemicals (SIC 286).

f. Nitrogenous fertilizers; phosphatic fertilizers; fertilizers, mixing only; pesticides; and other agricultural chemicals, not elsewhere classified (SIC 287).

g. Industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials (SIC 2891).

h. Explosives (SIC 2892).

i. Printing ink, including gravure, screen process, and lithographic ink, and carbon black (SIC 2893 and 2894); and, due to the nature of manufacturing activities, EPA has included industrial facilities represented by SIC 3952 in this category, but only those primarily engaged in the manufacturing of ink and paints, including china painting enamels, india and drawing ink, platinum paints for burnt wood or leather work, paints for china painting, artists' paints and artists' water colors.

j. Miscellaneous that are not in Sections a. through i. of this part, such as fatty acids, essentials oils, nonvegetable gelatin, sizes, bluing, laundry sours, writing and stamp pad ink, industrial compounds, such as boiler and heat insulating compounds, metal, oil, and water treatment compounds, waterproofing compounds, and chemical supplies for foundries (SIC 2899).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Pollutants Found in Storm Water Discharges

Water quality impacts caused by storm water discharges associated with an industrial activity from Chemical and Allied Products Manufacturing facilities are expected to vary depending on several factors. Such factors include the geographic location and hydrology of the site, the type of manufacturing and/or industrial activities, the amount and type of operations and material storage occurring outside, imperviousness of surfaces at the site, and the impact of a given precipitation event. In addition, sources of pollutants from non-storm water discharges such as washwaters from industrial areas, illicit connections, and spills may increase the pollutant loading to waters of the United States. Because there is a wide variety of products and manufacturing activities in this sector of today's proposed permit, EPA has subdivided the chemicals and allied products manufacturing industry into "subsectors."

Part 1 of the group application required a summary of industrial activities and the significant materials stored exposed to precipitation. This provided useful qualitative information to EPA, but information that is not possible to quantify reliably due to differences in terminology and thoroughness. For the summary of industrial activities, some participants reported their industrial activity as "manufacture of product X," rather than listing the components of that main activity. Other participants listed some or all general industrial actions, e.g., "shredding" or "wastewater treatment." Products listed represent most of the industrial classifications which are subject to this section of today's proposed permit). Table C.1. lists the general industrial actions occurring at facilities according to part 1 of their group applications.

TABLE C–1.—INDUSTRIAL ACTIVITIES OCCURRING AT CHEMICAL AND ALLIED PRODUCT MANUFACTURERS

[As reported in Part 1 of Group Applications]

1. Storage of materials in tanks, either below or above ground
2. Wastewater treatment, use of activated sludge process, or land application of wastewaters
3. Bagging of materials/products
4. Blending and mixing of chemicals
5. Packaging of chemicals
6. Cooling towers
7. Crushing, Milling, Shredding, Granulation and Grinding of materials
8. Storage of cylinders used to contain industrial gases

TABLE C–1.—INDUSTRIAL ACTIVITIES OCCURRING AT CHEMICAL AND ALLIED PRODUCT MANUFACTURERS—Continued

[As reported in Part 1 of Group Applications]

9. Distribution of products
10. Storage of empty or full drums
11. Equipment storage and maintenance, including vehicles
12. Application of fertilizers or pesticides
13. Operation of a foundry
14. Fueling of vehicles
15. Hazardous waste temporary storage or operation of RCRA treatment, storage, or disposal facility
16. Hot oil system for cooling/heat exchange
17. Landfills or temporary refuse site
18. Application of lime
19. Loading/Unloading
20. Use of machinery to process materials
21. Material handling and warehousing
22. Plant yard and areas of past industrial activity
23. Access roads and rail tracks
24. Steam boilers
25. Thermal oxidation of lead

TABLE C–1.—INDUSTRIAL ACTIVITIES OCCURRING AT CHEMICAL AND ALLIED PRODUCT MANUFACTURERS—Continued

[As reported in Part 1 of Group Applications]

26. Washing of drums
27. Waste dumpster or compactor

Table C–2 shows the subsectors and their corresponding SIC codes and letters (from discharges covered under this section in this fact sheet).

Part 2 of the storm water group application required that quantitative data be submitted by a representative sampling subgroup. Tables C–3 and C–4 indicate the pollutants identified in Form 2F in Section VII, Part A. Part A includes the following pollutants: oil and grease, BOD_5, COD, TSS, total kjeldahl nitrogen, nitrate plus nitrite nitrogen, total phosphorus, and pH. Table C–3 presents information collected using grab samples and Table C–4 presents information collected using composite samples. For each of the pollutants included in these tables, concentrations were categorized and analyzed by "subsector."

TABLE C–2.—SUBSECTOR INDEX

Subsector	Discharge(s) covered	SIC code(s)
1	a	281.
2	b	282.
3	c	284.
4	d	285.
5	e	286.
6	f	287.
7	g, h, i, and j	2891, 2892, 2893, 2894, 2899, 3952.
8	Miscellaneous	28[1].

[1] Subsector 8 includes those facilities that indicated their SIC code only as 28, without the following 1 or 2 digits.

The first column of Table C–3 identifies the subsector.

TABLE C–3.—SUMMARY OF GRAB SAMPLES REPORTED FOR CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CHEMICAL AND ALLIED PRODUCT MANUFACTURING INDUSTRY[1]

[ii]	Pollutant name	Total samples	Total ND	Total detects	Mean	Min.	Max.	Median	95th perc.	99 perc.
1	BOD_5	16	3	13	12.1	0.0	67.0	7.0	67.0	67.0
	COD	16	0	16	101.4	20.0	350.0	80.0	350.0	350.0
	Nitrate + Nitrite Nitrogen	16	0	16	2.8	0.1	7.3	2.4	7.3	7.3
	Total Kjeldahl Nitrogen	16	2	14	18.7	0.0	132.0	4.1	132.0	132.0
	Oil and Grease	15	4	11	1.9	0.0	18.0	0.1	18.0	18.0
	pH	15	0	15	N/A	5.4	10.4	N/A	N/A	N/A
	Total Phosphorus	16	2	14	1.0	0.0	6.6	0.3	6.6	6.6
	TSS	16	0	16	156	6	790	99	790	790
2	BOD_5	41	3	38	11.5	0.0	66.0	6.0	35.0	66.0
	COD	42	3	39	58.1	0.0	162.0	38.5	157.0	162.0
	Nitrate Plus Nitrate Nitrogen	43	4	39	4.3	0.0	140.3	0.8	3.8	140.3
	Nitrogen, Total Kjeldahl	42	0	42	3.5	0.2	47.2	1.5	9.0	47.2
	Oil and Grease	42	26	16	2.0	0.0	15.0	0.0	12.0	15.0
	pH	42	0	42	N/A	3.6	7.7	N/A	N/A	N/A
	Total Phosphorus	43	8	35	0.4	0.0	4.2	0.1	1.9	4.2
	TSS	42	6	36	157	0	2708	40	658	2708
3	BOD_5	19	2	17	53.2	0.0	340.0	16.0	340.0	340.0
	COD	19	0	19	245.3	28.0	1200.0	120.0	1200.0	1200.0
	Nitrate Plus Nitrate Nitrogen	19	1	18	1.4	0.0	5.0	1.2	5.0	5.0
	Nitrogen, Total Kjeldahl	19	0	19	3.5	0.8	11.4	2.6	11.4	11.4
	Oil and Grease	19	11	8	4.6	0.0	40.0	0.0	40.0	40.0
	pH	19	0	19	N/A	3.5	8.0	N/A	N/A	N/A
	Total Phosphorus	19	0	19	1.6	0.0	9.0	0.4	9.0	9.0
	TSS	20	0	20	313	6	1522	74	1499	1522
4	BOD_5	3	1	2	4.7	0.0	11.0	3.0	11.0	11.0
	COD	3	1	2	50.3	0.0	84.0	67.0	84.0	84.0
	Nitrate Plus Nitrate Nitrogen	3	1	2	0.4	0.0	1.2	0.1	1.2	1.2
	Nitrogen, Total Kjeldahl	3	0	3	1.3	0.3	1.9	1.6	1.9	1.9
	Oil and Grease	3	1	2	4.7	0.0	9.6	4.6	9.6	9.6
	pH	3	0	3	N/A	6.7	7.7	N/A	N/A	N/A
	Total Phosphorus	3	0	3	0.2	0.2	0.3	0.2	0.3	0.3
	TSS	3	0	3	433	4	824	470	824	824
5	BOD	8	0	8	8.7	2.0	16.0	8.8	16.0	16.0
	COD	8	0	8	161.8	25.0	290.0	175.0	290.0	290.0
	Nitrate Plus Nitrate Nitrogen	8	2	6	0.3	0.0	0.7	0.1	0.7	0.7
	Nitrogen, Total Kjeldahl	8	0	8	4.1	0.6	19.0	1.8	19.0	19.0
	Oil and Grease	8	6	2	0.3	0.0	1.3	0.0	1.3	1.3
	pH	8	0	8	N/A	6.3	8.8	N/A	N/A	N/A
	Total Phosphorus	8	0	8	0.6	0.0	1.4	0.3	1.4	1.4

TABLE C–3.—SUMMARY OF GRAB SAMPLES REPORTED FOR CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CHEMICAL AND ALLIED PRODUCT MANUFACTURING INDUSTRY[1]—Continued

[ii]	Pollutant name	Total samples	Total ND	Total detects	Mean	Min.	Max.	Median	95th perc.	99 perc.
	TSS	8	0	8	157	13	650	61	650	650
6	BOD_5	22	6	16	4.4	0.0	13.0	4.3	10.6	13.0
	COD	22	2	20	72.5	0.0	400.0	52.9	190.0	400.0
	Nitrate Plus Nitrate Nitrogen	17	1	16	35.9	0.0	315.0	3.8	315.0	315.0
	Nitrogen, Total Kjeldahl	22	0	22	84.4	0.0	1020.0	7.4	520.0	1020.0
	Oil and Grease	23	12	11	6.0	0.0	95.0	0.0	9.9	95.0
	pH	20	0	20	N/A	5.3	7.8	N/A	N/A	N/A
	Total Phosphorus	22	0	22	17.8	0.1	110.0	5.0	97.3	110.0
	TSS	22	1	21	493	0	5182	77	2332	5182
7	BOD_5	26	2	24	143.2	0.0	3420.0	9.0	47.0	3420.0
	COD	28	1	27	70.4	0.0	394.0	42.5	149.0	394.0
	Nitrate Plus Nitrate Nitrogen	28	3	25	1.0	0.0	4.9	0.6	2.8	4.9
	Nitrogen (Total)	4	0	4	1.3	0.2	1.8	1.6	1.8	1.8
	Nitrogen, Total Kjeldahl	27	2	25	1.7	0.0	5.5	1.3	5.4	5.5
	Oil and Grease	29	11	18	4.4	0.0	23.0	2.0	17.1	23.0
	pH	29	0	29	N/A	4.6	9.3	N/A	N/A	N/A
	Total Phosphorus	29	11	18	0.2	0.0	1.6	0.1	0.7	1.6
	TSS	28	9	19	50	0	415	13	396	415
8	BOD_5	30	2	28	14.3	0.0	67.0	8.0	63.0	67.0
	COD	30	0	30	80.5	11.0	450.0	59.5	250.0	450.0
	Nitrate Plus Nitrate Nitrogen	30	0	30	2.0	0.1	30.1	0.8	4.8	30.1
	Nitrogen, Total Kjeldahl	27	0	27	3.4	0.3	22.5	1.8	12.3	22.5
	Oil and Grease	30	6	24	5.1	0.0	40.0	3.0	19.0	40.0
	pH	30	0	30	N/A	4.9	8.3	N/A	N/A	N/A
	Total Phosphorus	30	0	30	0.4	0.0	2.5	0.2	1.9	2.5
	TSS	30	1	29	124	0	590	35	583	590

[1] All units are in mg/L, except for pH which is in SU.
[ii] Subsector.

Table C–4.—Summary of Composite Samples Reported for Conventional and Nonconventional Pollutants in Storm Water Discharges Associated With Industrial Activity From the Chemical and Allied Product Manufacturing Industry[1]

[ii]	Pollutant name	Total samples	Total ND	Total detects	Mean	Min.	Max.	Median	95th perc.	99th perc.
1	BOD_5	16	3	13	8.9	0.0	26.0	7.5	26.0	26.0
	COD	16	2	14	63.6	0.0	320.0	36.5	320.0	320.0
	Nitrate Plus Nitrite Nitrogen	16	0	16	1.9	0.1	7.1	1.3	7.1	7.1
	Nitrogen, Total Kjeldahl	16	3	13	7.1	0.0	19.4	3.2	19.4	19.4
	Total Phosphorus	16	2	14	0.8	0.0	6.1	0.4	6.1	6.1
	TSS	16	0	16	80	1	320	22	320	320
	BOD_5	36	0	36	11.4	1.0	66.0	6.6	34.0	66.0
2	COD	38	3	35	52.6	0.0	169.0	35.5	159.0	169.0
	Nitrate Plus Nitrite Nitrogen	39	1	38	5.3	0.0	158.0	1.0	8.0	158.0
	Nitrogen, Total Kjeldahl	38	2	36	4.0	0.0	56.8	1.4	18.3	56.8
	Total Phosphorus	39	9	30	0.4	0.0	4.4	0.10	3.6	4.4
	TSS	38	3	35	95	0	816	27	359	816
3	BOD_5	20	1	19	23.2	0.0	108.0	6.5	96.0	108.0
	COD	19	2	17	132.5	0.0	530.0	80.0	530.0	530.0
	Nitrate Plus Nitrite Nitrogen	19	1	18	1.0	0.0	4.20	0.8	4.2	4.2
	Nitrogen, Total Kjeldahl	19	3	16	2.3	0.0	9.0	1.4	9.0	9.0
	Total Phosphorus	19	2	17	0.6	0.0	1.9	0.4	1.9	1.9
	TSS	20	1	19	154	0	880	39	760	880
4	BOD_5	3	0	3	20.7	12.0	36.0	14.0	36.0	36.0
	COD	3	1	2	42.3	0.0	72.0	55.0	72.0	72.0
	Nitrate Plus Nitrite Nitrogen	3	1	2	0.5	0.0	1.30	0.3	1.3	1.3
	Nitrogen, Total Kjeldahl	3	0	3	1.6	0.6	2.8	1.3	2.8	2.8
	Total Phosphorus	3	0	3	0.2	0.1	0.3	0.3	0.3	0.3
	TSS	3	0	3	47	2	130	9	130	130
5	BOD_5	8	0	8	7.8	2.0	19.0	6.9	19.0	19.0
	COD	8	0	8	181.5	26.0	640.0	92.5	640.0	640.0
	Nitrate Plus Nitrite Nitrogen	8	2	6	0.8	0.0	3.4	0.4	4.0	4.0
	Nitrogen, Total Kjeldahl	8	0	8	2.3	0.8	7.2	1.4	7.2	7.2

[a]	Pollutant name	Total samples	Total ND	Total detects	Mean	Min.	Max.	Median	95th perc.	99th perc.
	Total Phosphorus	8	0	8	0.6	0.0	2.2	0.4	2.2	2.2
	TSS	8	0	8	282	13	1100	51	1100	1100
6	BOD_5	22	5	17	6.8	0.0	43.5	4.7	13.0	43.5
	COD	22	3	19	42.6	0.0	138.0	33.5	125.0	138.0
	Nitrate Plus Nitrite Nitrogen	17	1	16	19.3	0.0	85.0	3.5	85.0	85.0
	Nitrogen, Total Kjeldahl	22	0	22	105.9	0.8	1460.0	11.9	542.0	1460.0
	Total Phosphorus	22	0	22	65.7	0.2	982.0	11.8	137.0	982.0
	TSS	20	1	19	118	0	593	50	523	593
7	BOD_5	21	3	18	11.3	0.0	98.0	6.0	19.0	98.0
	COD	23	0	23	63.3	19.0	382.0	41.0	150.0	382.0
	Nitrate Plus Nitrite Nitrogen	22	1	21	1.0	0.0	3.1	0.6	3.1	3.1
	Nitrogen (Total)	2	0	2	0.8	0.6	0.9	0.8	0.9	0.9
	Nitrogen, Total Kjeldahl	21	3	18	1.4	0.0	4.1	1.2	3.7	4.1
	Total Phosphorus	23	10	13	0.1	0.0	0.4	0.1	0.4	0.4
	TSS	23	7	16	48	0	350	5	295	350
8	BOD_5	30	2	28	10.1	0.0	84.0	4.0	51.0	84.0
	COD	30	1	29	92.4	0.0	1500.0	35.0	130.0	1500.0
	Nitrate Plus Nitrite Nitrogen	30	0	30	1.5	0.0	20.2	0.7	5.1	20.2
	Nitrogen, Total Kjeldahl	27	0	27	2.3	0.8	11.8	1.3	7.0	11.8
	Total Phosphorus	28	0	28	0.3	0.0	1.2	0.2	1.2	1.2
	TSS	30	1	29	35	0	300	12	126	300

[a]All units are in mg/L, except for pH which is in SU.
[a]Subsector.

Part 2 group application data that were statistically summarized indicated variations in the minimum and maximum values reported for each of the eight conventional pollutants monitored:

Subsector 1

- Oil and grease samples ranged from 0.0 mg/L to 18.0 mg/L.
- Grab sample values for Total Suspended Solids (TSS) ranged from 6 mg/L to 790 mg/L.
- Grab sample values for Chemical Oxygen Demand (COD) ranged from 20.0 mg/L to 350.0 mg/L.

Subsector 2

- Oil and grease samples ranged from 0.0 mg/L to 15.0 mg/L.
- Grab sample values for TSS ranged from 0 mg/L to 2,708 mg/L.
- Grab sample values for COD ranged from 0.0 mg/L to 162.0 mg/L.

Subsector 3

- Oil and grease samples ranged from 0.0 mg/L to 40.0 mg/L.
- Grab sample values for TSS ranged from 6 mg/L to 1,522 mg/L.
- Grab sample values for COD ranged from 28.0 mg/L to 1,200.0 mg/L.

Subsector 4

- Oil and grease samples ranged from 0.0 mg/L to 9.6 mg/L.
- Grab sample values for TSS ranged from 4 mg/L to 824 mg/L.
- Grab sample values for COD ranged from 0.0 mg/L to 84.0 mg/L.

Subsector 5

- Oil and grease samples ranged from 0.0 mg/L to 1.3 mg/L.
- Grab sample values for TSS ranged from 13 mg/L to 650 mg/L.
- Grab sample values for COD ranged from 25.0 mg/L to 290.0 mg/L.

Subsector 6

- Oil and grease samples ranged from 0.0 mg/L to 95.0 mg/L.
- Grab sample values for TSS ranged from 0 mg/L to 5,182 mg/L.
- Grab sample values for COD ranged from 0.0 mg/L to 400.0 mg/L.

Subsector 7

- Oil and grease samples ranged from 0.0 mg/L to 23.0 mg/L.
- Grab sample values for TSS ranged from 0 mg/L to 415 mg/L.
- Grab sample values for COD ranged from 0.0 mg/L to 394.0 mg/L.

Subsector 8

- Oil and grease samples ranged from 0.0 mg/L to 40.0 mg/L.
- Grab sample values for TSS ranged from 0 mg/L to 590 mg/L.
- Grab sample values for COD ranged from 11.0 mg/L to 450 mg/L.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. Part 2 data indicates that the high levels of pollutants at some facilities are atypical to those experienced by the majority of chemical and allied products manufacturing facilities. Tables C–3 and C–4 indicate sampling results for the conventional pollutants that were statistically analyzed by EPA. The tables indicate the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of samples analyzed for each of the conventional pollutants. Table C–5 indicates values for some nonconventional pollutants statistically summarized for this section.

TABLE C–5.—STATISTICS FOR NONCONVENTIONAL POLLUTANTS IN STORM WATER (MG/L)

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Ammonia	21	15	75.22	40.45	0.12	0.27	564.0	1460.0	0.52	0.55	395.0	1460.0	564.0	1460.0
Aluminum	28	27	1.78	1.20	0.0	0.0	7.82	7.87	0.94	0.41	6.9	5.5	7.82	7.87
Copper	50	45	0.19	0.12	0.0	0.0	4.97	2.9	0.01	0.0	0.21	0.19	4.97	2.9
Manganese	18	18	0.71	0.56	0.0	0.01	3.5	2.57	0.11	0.33	3.5	2.57	3.5	2.57
Zinc	75	70	2.11	1.74	0.0	0.0	53.4	42.6	0.24	0.24	7.7	4.2	53.4	42.6
Iron	29	29	3.52	2.24	0.24	0.07	22.0	11.0	1.3	0.56	10.5	8.14	22.0	11.0

Table C–6, below, shows all pollutants detected in each subsector, as reported in part 2 of the group applications. In addition, some of these pollutants were included based on research during the development of effluent limitation guidelines for the industry.

TABLE C–6.—POTENTIAL POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CHEMICAL AND ALLIED PRODUCTS MANUFACTURING INDUSTRY

Subsector	Potential pollutants
1	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, Aluminum, Boron, Chromium, Iron, Magnesium, Sulfate, 1,1,1-Trichloroethane, Ammonia, Calcium, and Chlorine.
2	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, Chlorine, Cyanide, Fecal Coliform, Formaldehyde, TSS, Aluminum, Antimony, Bromide, Chromium, Color, Copper, Lead, Magnesium, Nickel, Styrene, Sulfate, Sulfite, TTO, Zinc, and Tetrachloroethane.
3	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, Aluminum, Barium, Color, Copper, Di-n-butyl Phthalate, Diethyl phthalate, Manganese, Mercury, Sulfate, Surfactants, Titanium, Toluene, Zinc and Chlorine.
4	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, Barium, Cadmium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Silver, Thallium, Tin, Zinc, 2-Heptanone, Toluene, Xylene, Aluminum, Ethyl Benzene, and Beryllium.
5	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, 1,2-dichloroethane, Copper, Formaldehyde, Lead, Phenols, TTO, and Zinc.
6	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, 2,4-D (2,4-dichlorophenoxyacetic acid), Aluminum, Ammonia, Boron, Cadmium, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Sulfate, Sulfide, Surfactants, Zinc and Methyl Chloride.
7	BOD_5, COD, Nitrogen, Oil and Grease, pH, Phosphorus, TSS, 1,1,1-Trichloroethane, Aluminum, Ammonia, Color, Iron, Nitrogen, Zinc.

3. Options for Controlling Pollutants

As required in part 1 of the storm water group permit application, participants were required to provide information regarding existing storm water management practices and controls. Table C–7 below identifies the material management practices for the identified sampling facilities.

TABLE C–7.—CURRENT STORM WATER MANAGEMENT PRACTICES USED BY THE CHEMICAL AND ALLIED PRODUCTS MANUFACTURING INDUSTRY

[As reported in Part 1 of the group applications][1]

Subsector	Current management practices
1	Unloading Boot, Catch Basin, Containment, Covering, Curbing, Dike Diversion, Housekeeping, Inspection of Equipment, Infiltration, Oil/Water Separator, Roof, SPCC, Sump, Storm Water Collector for Water Reuse, Training, Indoor Storage.
2	Catch Basin, Covering, Dike, Indoor Storage, Pond, SPCC, Swale, Vegetation Strip.
3	Caps on Tank Vents, Concrete Pad, Containment, Covering, Curbing, Dike, Diversion, Drain, Hazardous Waste Management, Hazardous Waste Pad, Holding Tank, Indoor Storage, Infiltration, Pond, Roof, Sealed Drums, SPCC, Storm Water Collector, Tarp, Vaulted.
4	Containment, Covering, Dike, Holding Tank, Infiltration, Pond, Roof Drain, Site Inspection, SPCC, Swale, Training, Waste Minimization.
5	Curbing, Dike, Pond, SPCC.
6	Catch Basin, Covering, Dike, Housekeeping, Indoor Storage, Infiltration, Oil/Water Separator, Pond, Roof, Site Inspection, SPCC, Sump, Swale, Sweep, Valves.
7	Absorbent Materials, BMP Plan, Catch Basin, Concrete Pad, Containment, Covering, Curbing, Dike, Drain, Drip Pan, Housekeeping, Indoor Storage, Infiltration, Oil/Water Separator, Pond, Roof, Inspection, Sloped Containment, SPCC, Sump, Swale, Training, Valves.
8	Catch basin, Containment, Covering, Dike, Indoor Storage, Pond, Roof, Site Inspection, SPCC, Swale, Training.

[1]The information presented in this table was received from part 1 group applications for Sector 3.

In order to develop achievable storm water management practices and controls, EPA has evaluated all existing management practices as well as practices developed and implemented under the September 9, 1992, storm water general permit. For a detailed explanation regarding specific storm water controls and management practices, the reader may refer to the pollution prevention plan requirements section below.

4. Special Conditions

a. Prohibition of non-storm water discharges. In addition to Part III.A of today's proposed permit, EPA has specified that the following types of discharges are not authorized by this section:

- Inks, paints or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill including materials collected in drip pans.
- Washwaters from material handling and processing areas. This includes areas where containers, equipment and industrial machinery are exposed to storm water.
- Washwaters from areas where raw materials, intermediate products, final products, waste materials, by-products and significant materials from past industrial activity are exposed to storm water.
- Washwaters from drum, tank or container rinsing and cleaning.

EPA has included these prohibitions in order to emphasize that spilled materials should be cleaned up and properly disposed, and that washwaters constitute process wastewater and not storm water. These types of discharges contribute excessive amounts of pollutants to water bodies and must be permitted by an NPDES permit for process wastewater, as they are not authorized by this section.

b. Rain gauge installation and precipitation log. As part of the monitoring and reporting requirements of today's proposed permit, EPA is requiring that permittees install a rain gauge. For permittees that are required to sample under Part C.7., the rain gauge shall be installed no later than [270 days after permit issuance], and shall maintain the rain gauge for the extent of the four sampling periods. In addition, permittees must keep daily records of precipitation indicating the date and amount of precipitation. These records shall be signed by qualified facility personnel and shall be retained onsite.

Permittees that are required to conduct monitoring must provide information regarding the storm event, including: the date and duration (in hours) of the storm event sampled; rainfall measurements of the storm event sampled; the duration between

the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and the total volume (in gallons) of the discharge sampled.

c. Pollution prevention plan certifications. EPA is establishing additional notification requirements for pollution prevention plan development and implementation. As explained elsewhere in today's proposed permit, EPA is focusing on and expending a great deal of effort in the development and implementation of pollution prevention programs as preventive pollution controls rather than end-of-pipe treatment.

In order to make sure that permittees comply with the plan's requirements and deadlines, EPA is proposing to require that permittees certify that plans are developed and implemented in accordance with the permit conditions. A certification signed by the person who fulfills the signatory requirements of the permit shall be submitted to EPA 5 days after the plan implementation deadline.

5. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. Today's proposed permit requires that all facilities covered under this section prepare a Drainage and Site Plan. Based on the information contained in the part 1 application, EPA has identified and specified areas where materials are commonly handled. EPA is requiring that the site plan detail the drainage patterns of the runoff and identify the outfall and receiving water body.

(1) Description of potential pollutant sources. The Inventory of Exposed Materials as well as Risk Identification and Summary of Potential Pollutants Sources requirements were further defined to avoid confusion. In addition, EPA is requiring that the information submitted in the group application regarding pollutant sources and current management practices be evaluated and considered when developing the plan.

(2) Measures and controls. EPA has divided this section of the permit into two parts. The first part addresses nonstructural pollution prevention controls, while the second part addresses structural controls.

The following requirements were established by EPA under the nonstructural conditions to identify specific practices that must be implemented by all permittees:

(a) Good housekeeping—EPA conducted a series of inspections to identify areas of concern, materials exposed to storm water and current management practices used by the chemicals and allied products manufacturing industry. In addition, EPA reviewed a series of existing pollution prevention plans that were developed under the requirements of the September 25, 1992, general permit. Based on this review, EPA is requiring that at a minimum, permittees shall establish the following good housekeeping practices:

(i) Schedule regular pickup and disposal of garbage and waste materials. This schedule shall be included in the plan. Individuals responsible for waste management and disposal shall be informed of the procedures established under the plan,

(ii) Routinely inspect for leaks and conditions of drums, tanks and containers. Ensure that spill cleanup procedures are understood by employees,

(iii) Keep an up-to-date inventory of all materials present at the facility. While preparing the inventory, all containers should be clearly labeled. Hazardous containers that require special handling, storage, use and disposal considerations shall be clearly marked,

(iv) Maintain clean ground surfaces by using brooms, shovels, vacuum cleaners or cleaning machines.

(b) Employee training—Training should also address procedures for equipment and containers cleaning and washing. The training should emphasize the human hazards and the potential environmental impacts from the discharges of washwaters. In addition, today's proposed permit requires that the pollution prevention plan identify periodic dates for such training of at least once per year.

(c) Facility security—During site inspections, EPA found facilities with poor security systems. Facilities must evaluate existing security systems such as fencing, lighting, vehicular traffic control, and securing of equipment and buildings and should include existing and new system into the plan to prevent accidental or intentional entry which could cause a discharge of pollutants to waters of the United States.

Under the structural conditions, EPA has identified specific practices that must be implemented by all permittees. These structural practices are divided into four activities/areas: Material handling and storage; management of runoff; sediment and erosion control; and sampling.

(i) Under material handling and storage, EPA is requiring a series of management practices to minimize materials exposed to precipitation. These areas were selected after evaluation of part 1 data and current practices used by the group participants. For areas where liquid or powdered materials are stored, facilities shall provide either diking, curbing, or berms. For all other outside storage areas including storage of used containers, machinery, scrap and construction materials, and pallets, facilities shall prevent or minimize storm water runon to the storage area by using curbing, culverting, gutters, sewers or other forms of drainage control. For all storage areas, roofs, covers or other forms of appropriate protection shall be used to prevent exposure to weather. In areas where liquid or powdered materials are transferred in bulk from truck or rail cars, permittees shall provide appropriate measures to minimize contact of material with precipitation. Hose connection points at storage containers shall be inside containment areas. Drip pans shall be used in areas which are not in a containment area, where spillage may occur (e.g., hose reels, connection points with rail cars or trucks). Material collected in drip pans shall not be discharged to waters of the U.S. In areas of transfer of contained or packaged materials and loading/unloading areas, permittees shall provide appropriate protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks.

In order to prevent facilities from discharging contaminated storm water from areas where precipitation is contained, contained areas must be restrained by valves or other positive means to prevent the discharge of a spill or leak. Containment units may be emptied by pumps or ejectors; however, these shall be manually activated. Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design. If facility drainage is not engineered as above, the final discharge of all in-facility sewers shall be equipped with a diversion system that could, in the event of an uncontrolled spill of materials, return the spilled material to the facility.

(ii) Under management of runoff conditions, EPA is requiring that the plan contain a description of storm water management practices used and/or to be used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site.

(iii) For areas with a potential for significant soil erosion, EPA is requiring that permanent stabilization practices be described and that the plan ensure that disturbed areas are stabilized. The

measures will minimize the amount of sediment materials in the discharge.

(iv) Finally, the structural controls require that the facility provide for an appropriate sampling point. Sampling points should be identified by January 1, 1995. This requirement will ensure that permittees prepare a representative and adequate storm water outfall and that the selected sampling meets the requirements of this section of today's proposed permit.

b. Comprehensive site compliance evaluation. In accordance with 40 CFR 122.24(i)(4)(i), EPA has established that comprehensive site compliance evaluation inspections be conducted at least once every quarter. Members of the pollution prevention team or a qualified professional designated by the team must conduct the inspections.

A wet weather evaluation (during a rainfall event) shall be conducted in the second (April to June) and third quarters (July to September) of the year. A dry weather evaluation (no precipitation) shall be conducted in the first (January to April) and fourth quarters (October to December).

However, where a seasonal arid period is sustained for more than 3 months, a dry weather inspection will satisfy the wet weather comprehensive compliance evaluation inspection requirement. This requirement will assure that permittees conduct at least one comprehensive site compliance evaluation inspection every quarter.

EPA believes that this requirement will satisfy the requirements of this section by measuring the effectiveness of the pollution prevention plan during dry and wet weather conditions. These inspections will increase awareness and responsibility for storm water pollution. Moreover, conducting these dry and wet weather inspecting on a quarterly basis will provide permittees with a tool for evaluating best management practices, structural and nonstructural measures, good housekeeping and spill cleaning procedures, among other pollution prevention activities.

6. Numeric Effluent Limitations

a. Phosphate fertilizer manufacturing runoff. Part XI.C.5.a. of today's proposed permit establishes numeric effluent limitations for storm water discharges from facilities identified by SIC 287, the Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category, are subject to effluent limitations guidelines at 40 CFR part 418. The term contaminated storm water runoff shall mean precipitation runoff, which during manufacturing or processing, comes into accidental contact with any raw materials, intermediate product, finished product, by-products or waste product. The concentration of pollutants in storm water discharges shall not exceed the following effluent limitations included in Table C–8 below:

TABLE C–8

Effluent characteristics	Effluent limitations (mg/L)	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Total Phosphorus (as P)	105.0	35.0
Fluoride	75.0	25.0

Facilities with discharges as described above must be in compliance with these effluent limitations upon commencement of coverage and for the entire term of this permit. Discharges that are associated with industrial activities that do not contain runoff from the areas or activities specified above are not subject to the effluent limitation as noted in Table C–8 above.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that chemical manufacturing facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires chemical manufacturing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table C–9. The pollutants listed in Table C–9 were found to be above benchmark levels for a significant portion of chemical manufacturing facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from chemical manufacturing facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from chemical manufacturing facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table C–9. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE C–9.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Total Recoverable Aluminum.	0.75 mg/L
Total Recoverable Ammonia.	0.093 mg/L
Total Recoverable Copper.	0.009 mg/L
Total Recoverable Manganese.	0.05 mg/L
Total Recoverable Zinc.	0.065 mg/L
Total Recoverable Iron.	0.3 mg/L
Total Kjeldahl Nitrogen (TKN).	1.5 mg/L
Nitrate plus Nitrite Nitrogen.	0.68 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table C–9, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table C–9, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE C–10.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring.

TABLE C–10.—SCHEDULE OF MONITORING—Continued

4th Year of Permit Coverage	• Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table C–9, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table C–9, then no further sampling is required for that parameter. • Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table C–9. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will be used to reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification.. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, and that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge of both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Compliance monitoring requirements. Today's proposed permit requires permittees with phosphate fertilizer manufacturing facilities with contaminated storm water discharges to monitor for the presence of phosphorus and fluoride. These monitoring requirements are necessary to evaluate compliance with the numeric effluent limitation proposed for these discharges. EPA requests comment upon the appropriateness of proposed monitoring frequency for these discharges. Monitoring shall be performed upon a minimum of one grab sample. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. When a

facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. The permittee shall include a description of the location of the outfalls, an explanation of why outfalls are expected to discharge substantially identical effluents, an and estimate of the size of the drainage area and runoff coefficient with the monitoring results. Monitoring results shall be submitted Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the month following collection of the sample. Facilities which discharge through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must also submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system.

g. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at chemical and allied products manufacturing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

h. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from chemical and allied product facilities. These notices specifically require that facilities with storm water discharges that come into contact with solid chemical storage piles that are associated with chemical and allied products are required to monitor their storm water discharges for oil and grease, COD, TSS, and pH. Today's proposed permit contains different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for chemical and allied product facilities in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.C.6. of today's proposed permit.

a. Analytical monitoring requirements. Permittees shall monitor for the pollutants noted in Table C–11 at least one measurable rain event for each outfall comprised of storm water discharges associated with industrial activity in each of the sampling periods except as provided in paragraphs XI.C.8.b. (Lack of Measurable Storm Event) and Part VI. (Sampling Waiver and Representative Discharge). Permittees shall report in accordance with Part VI.C. (Reporting: Where to Submit) and paragraph XI.C.8.e. (Reporting: When to Submit). The following are the sampling periods:

- First sampling period begins on January 1, 1995, and ends on June 30, 1995;
- Second sampling period begins on July 1, 1995, and ends on December 31, 1995;
- First sampling period begins on January 1, 1996, and ends on June 30, 1996; and
- Second sampling period begins on July 1, 1996, and ends on December 31, 1996.

Permittees that are required to sample under Part C.8.c. shall install a rain gauge no later 6 months after the effective date of this general permit, and shall maintain the rain gauge for the extent of the permit. In addition, permittees must keep daily records of precipitation indicating the date and amount of precipitation. These records shall be signed by qualified facility personnel and shall be retained onsite.

In addition to sample data for the parameters listed in Table C–11 below, the permittee shall provide the date and duration (in minutes) of the storm event sampled, total rainfall of the storm event (in inches), the time between the storm water event that is sampled and the end of the previous measurable storm event (greater than 0.1 inch rainfall), the maximum flow rate during rain event (specify units), and the total volume (in gallons) of the discharge sampled.

TABLE C–11.—MONITORING REQUIREMENTS FOR THE CHEMICAL AND ALLIED PRODUCTS MANUFACTURING INDUSTRY

Industry sector(s)	Monitoring is required	Monitoring is required if the pollutant(s) are used at the industrial site
281	Oil and Grease, Chemical Oxygen Demand, pH, Total Suspended Solids, Total and Hexavalent Chromium, Sulfate, and Magnesium.	Monitoring is Required for Any Other Pollutants Limited by an Effluent Limitation Guideline for Which the Facility is Subject To.
282	Oil and Grease, pH, Chemical Oxygen Demand, Total Suspended Solids, Phosphorus, Copper, Zinc, Aluminum, Chromium, Lead, and Nickel.	Styrene, Tetrachloroethene, and Any Other Solvents.
284	5-Day Biochemical Oxygen Demand, Chemical Oxygen Demand, Total Suspended Solids, pH, Oil and Grease, and Surfactants.	Copper, Total Chlorine, Di-N Butyl Phthalate, Zinc, And Any Other Solvents.
285	Chemical Oxygen Demand, Total Suspended Solids, Oil and	Nickel, Thallium, Silver, Ethyl Benzene, Naphthalene.
2893	Grease, Lead, Zinc, Copper, Chromium, Xylene, and Toluene.	
3952		
286	Chemical Oxygen Demand, Total Suspended Solids, pH, Oil and	N/A.
2879	Grease, Total Toxic Organic, Copper, Lead, Phenols, and Zinc.	
287	5-Day Biochemical Oxygen Demand, Total Suspended Solids,	In addition to the sampling requirements of this sub sector (SIC 287), facilities identified by SIC 2874 Shall Test For Fluoride.
Except	pH, Oil and Grease, Phosphorus, Total Kjeldahl Nitrogen, Ni-	
2879	trate Plus Nitrite Nitrogen, Manganese, Sulfate, Zinc.	
289	Chemical Oxygen Demand, Total Suspended Solids, pH, Oil and	Monitoring is Required for Any Other Pollutants Limited by an Effluent Limitation Guideline for Which the Facility is Subject To.
Except	Grease, Zinc and Any Solvents.	
2893		

b. Lack of measurable storm event. In the event that the permittee is unable to sample during a sampling period due to a seasonal dry period, the permittee shall attempt to monitor two measurable events in the following sampling period. These two measurable shall be taken with at least 72 hours apart. Monitoring results obtained under this paragraph shall be reported in accordance with part VI.C. (Reporting: Where to Submit) and paragraph XI.C.8.e. (Reporting: When to Submit). This paragraph is applicable to paragraphs XI.C.8.a. and XI.C.8.c.

c. Monitoring for discharges with numeric effluent limitations. In addition to the requirements of paragraph XI.C.8.a., during the period beginning on the effective date and lasting through the expiration date of the permit, permittees with coal pile runoff discharges or from the phosphate fertilizer manufacturing runoff discharges, shall monitor those storm water discharges at least semiannually (2 times per year) for the pollutants limited in parts XI.C.6.a. and XI.C.6.b., respectively. Permittees shall report in accordance with part VI.C. (Reporting: Where to Submit) and paragraph XI.C.8.e. (Reporting: When to Submit).

d. Monitoring of discharges from contained areas. Each time there is a discharge of storm water from contained areas where liquid or powdered materials are stored outside, it should be recorded. The permittee shall record the date of the discharge, whether the discharge resulted from an overflow of the area or by opening a valve or operating pump, and the material(s) that is (are) stored in the contained area. Prior to discharge, the storm water should be visibly inspected for visible solids, discoloration, and oil sheen. Records of these discharges should be maintained with the pollution prevention plan and in accordance with part VI.D. (Retention of Records) of the permit.

e. Reporting: When to submit. (1) Except for facilities with storm water discharges identified in part IX.C.8.c. (Monitoring for Discharges with Numeric Limitations), permittees are required to submit monitoring results obtained during the specified sampling periods. The permittee shall provide information regarding facility's NPDES permit number, SIC code, outfall number, existing data, and the mean and standard deviation for the monitoring results. Such monitoring results should be included in the following tables, signed in accordance with part VII.G., and submitted no later than December 31, 1997. In addition, the permittee shall attach to the tables the following information:

(a) How many regulated storm water outfalls?

(b) For each time the permittee sampled, how many regulated outfalls were tested? (Provide separately for the four sampling events).

(c) Rain Gauge Information:

(i) Number of precipitation days per sampling period—(Provide separately for the four sampling periods).

(ii) Total precipitation in inches per sampling period—(Provide separately for the four sampling periods).

(2) Permittees identified in part XI.C.8.c. (Monitoring for Discharges with Numeric Effluent Limitations) shall monitor during the sampling period running from January to June and during the sampling period running from July to December. Permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report (DMR) Form(s), or on Table C–12, postmarked no later than the 28th day of the following January. A separate DMR Form is required for each sampling period. The first report may include less than 12 months of information.

TABLE C–12.—REPORTING TABLES FOR THE CHEMICAL AND ALLIED PRODUCTS MANUFACTURING INDUSTRY

[Permit # _____ SIC # _____ Outfall # _____]

Pollutant name	Existing data	1st period	2nd period	3rd period	4th period	Effluent limitation	Mean	Std. dev.

TABLE C–12.—REPORTING TABLES FOR THE CHEMICAL AND ALLIED PRODUCTS MANUFACTURING INDUSTRY—Continued

[Permit # _____ SIC # _____ Outfall # _____]

Pollutant name	Existing data	1st period	2nd period	3rd period	4th period	Effluent limitation	Mean	Std. dev.

Date of storm event	Duration of storm event (in minutes)	Total rainfall during storm event (in inches)	Number of hours between measurable events	Maximum flow rate during rain event (specify units)	Total Volume from rain event (specify units)

[1] Provide a description of the method of flow measurement.

f. Sample type. Permittees should sample the discharge during normal business hours. In the event that the discharge commences during normal business hours, the permittee shall attempt to meet the sampling requirements specified in this section even if this requires sampling after normal business hours. Permittees shall attempt to meet the above protocol and collect samples beginning on the first day of the sampling period in order to ensure compliance with the specified sampling protocol and requirements. One grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

9. Cost Estimates

The cost of rain gauges varies from $25.00 to $7,200.00 depending on the type of equipment that facilities may purchase (manual or automatic, rain gauge included with automatic sampler, etc.). EPA estimates that the installation time of the rain gauge varies from 1 to 12 hours. EPA estimates that facility personnel will have to spend about 15 minutes in compiling the rain gauge measurements.

With the exception of the numeric effluent limitations in part XI.C.6.a., the requirements for industries covered under this part do not require expenditures beyond those estimates in parts VII. and VIII.B.

D. Storm Water Discharges Associated With Industrial Activity From Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with an industrial activity." This definition includes point source discharges of storm water from eleven major categories of facilities, including facilities commonly identified by Standard Industrial Classification (SIC) 29. Today's proposed permit only covers storm water discharges associated with industrial activities at facilities with a primary SIC code of 2951 (Asphalt Paving Mixtures and Blocks), 2952 (Asphalt Felts and Coatings), and 2992 (Lubricating Oils and Greases). Hereinafter, facilities with primary SIC codes 2951 or 2952 will be referred to as 'Asphalt Facilities,' and facilities with primary SIC code 2992 as 'Lubricant Manufacturers.'

Storm water discharges covered by this section include all discharges where precipitation and storm water runon come into contact with significant materials including, but not limited to, aggregate piles, other raw materials, waste products, byproducts, finished products, stored materials, and fuels. This includes storm water discharges from access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or byproducts created by the facility.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the

facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

This section is applicable to storm water discharges from portable plants. Portable plants were not included in the group application process due to their often frequent changes of location. Part 1 of the group application required location information for each facility, which was difficult to obtain or record for portable plants which may change locations several times per year. This section, however, is applicable to storm water discharges from portable plants, with the condition that a new Notice of Intent (NOI) be submitted for each location and the pollution prevention plan be revised accordingly with each change in location.

1. Industry Profile

Presented below are brief descriptions of the industrial activities associated with asphalt facilities and lubricant manufacturers. Table D–1 shows some common significant materials exposed at these types of facilities.

TABLE D–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS[i] [ii]

Activity	Pollutant source	Pollutant
Asphalt Facilities:		
Material Storage and Handling	Additives, asphalt, asphalt cement, asphalt concrete, asphalt felt, asphalt products, asphalt release agents, asphalt shingles, crushed stone, fuel, granite, granules, gravel, limestone, lubricants, mineral spirits, oil, quartzite rock, reclaimed asphalt pavement (RAP), sand, sandstone, slag.	TSS, Oil and Grease, pH, COD.
Lubricant Manufacturers:		
Material Storage and Handling	Oils, waste solvents, petroleum distillates, lubricants, chemical additives.	Oil and Grease, pH, TSS.

[i] Storm water group applications, parts 1 and 2.
[ii] EPA. Development Document on Paving and Roofing Materials (EPA 440/1–74/049).

Facilities manufacturing asphaltic concrete, paving materials, or block, are classified as SIC code 2951. Facilities primarily engaged in manufacturing asphalt roofing products, such as asphalt felts, shingles, and other products including tars, pitch, and roofing cements, are identified as SIC 2952. Facilities primarily engaged in manufacturing oils and lubricants are identified as SIC 2992.

a. Manufacturers of asphalt paving mixtures and blocks. Manufacturers classified in SIC 2951 store purchased asphalt in above ground tanks. They stockpile a variety of raw materials such as sand, gravel, crushed limestone, and Recycled Asphalt Products (RAP). These facilities produce asphalt concrete, and may also mold and cure asphalt concrete products such as asphalt blocks. There are two types of facilities associated with these activities, batch plants and drum plants.

Batch plants receive aggregate (sand, stone, limestone, gravel, etc.) in bulk by rail or truck. The aggregate is usually stockpiled outside. It is then transported by a conveyor or front-end loader to a rotary drier. When dried and heated the aggregate is transported to a screening unit which separates the aggregate into various sizes and deposits the graded aggregate into hot storage bins. Aggregate and mineral filler are then weighed and transported to a mixing unit or pug mill where they are mixed with heated asphalt cement to produce asphalt concrete. The resulting asphalt concrete is either stored in a heated silo or loaded directly onto trucks for transport to the job site.

At drum (cold feed) plants a measured amount of aggregate is placed in the drum where it is dried and heated. Heated asphalt cement is added to the same drum and mixed with the aggregate to produce asphalt concrete. The hot asphalt concrete produced by this process then goes to a surge bin or silo for storage until it is loaded onto trucks for delivery.

Hot-mix asphalt plants are often portable. There are three types of portable plants: portable, permanent, and semipermanent. Portable plants move from site to site, and the significant materials and equipment are removed upon completion of the job or project. Portable plants remain at a site anywhere from several days to several months. Permanent portable plants remain at a site on a permanent basis.

Like portable plants, semipermanent plants move from site to site. They differ, however, in that they return to locations on a recurring basis. Significant materials such as aggregate piles remain at the site while the plant is operating elsewhere. For the purposes of this section, semipermanent plants will be referred to as permanent plants, given that the effect on runoff from significant materials will essentially be the same at both sites. "Asphalt facilities" includes both permanent and portable plants unless specified otherwise.

Facilities which manufacture asphalt concrete block feed the asphalt/aggregate mixture into a block molding machine where the mix is rammed, pressed or vibrated into its final form. The product is then stacked and allowed to cure.

b. Manufacturers of roofing materials. Manufacturers classified in standard industrial code 2952 typically produce roofing felts, and impregnated roofing felts (shingles) and other products, such as tar papers, impregnated asphalt siding, expansion joints, roofing cements, tars and pitches. Many of the roofing products consist of materials coated with asphalt purchased from a vendor and then cured and stored out of doors until shipped.

c. Manufacturers of lubricating oils and greases. Facilities primarily engaged in blending, compounding, and re-refining lubricating oils and greases from purchased mineral, animal, and vegetable materials are identified as SIC code 2992. SIC code 2992 includes manufacturers of metalworking fluids, cutting oils, gear oils, hydraulic brake fluid, transmission fluid, and other automotive and industrial oil and greases.

Raw materials for SIC code 2992 facilities are typically petroleum or synthetic based stocks and various additives. The majority of lubricating manufacturers store base stocks and

chemical additives in tank farms or 55-gallon drums. SIC code 2992 facilities do not manufacture these raw materials, but rather blend and compound them to produce the product. Raw materials are proportioned according to the type of lubricant being produced.

"Batch processing" is the common production method relying on the same piece of equipment in manufacturing a variety of products. For example, in one "batch" a facility may combine the petroleum base stock with additive X in a 10,000 gallon blending tank to produce product "A." Using the same blending tank, the next "batch" is a mixture of the base stock and additive Y to produce product "B." Batch processing allows facilities to manufacture a variety of products. Some facilities, however, tend to specialize in producing a particular type of lubricant (e.g., solid, synthetic, or water based), often to meet the demands of a specific industry.

Finished products are packaged in containers or stored for bulk shipment. Almost all facilities have shipping and receiving areas and are involved with marketing and interstate distribution of their products. Most facilities have immediate access roads or rail lines at their facility sites.

2. Pollutants in Storm Water Discharges Associated With Asphalt Facilities and Lubricant Manufacturers

Impacts caused by storm water discharges from asphalt facilities and lubricant manufacturers will vary. Several factors influence to what extent significant materials from these types of facilities and processing operations may affect water quality. Such factors include: geographic location; hydrology/geology; the type of industrial activity occurring outside (e.g., material storage, loading and unloading); the type of material stored outside (e.g., asphalt, aggregate, limestone, oil, etc.); the size of the operation; and type, duration, and intensity of precipitation events. These and other factors will interact to influence the quantity and quality of storm water runoff. For example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities, while materials storage is a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,[53] spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Based on group application information and data, EPA has identified the storm water pollutants and sources resulting from asphalt facilities and lubricant manufacturers in Table D–1.

Table D–2 indicates the statistically summarized sampling data results for part 2 data submitted to EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. As Table D–2 indicates, large variations in the minimum and maximum values were often found for each of the eight conventional pollutants monitored. For example:

- Composite samples of TSS ranged from 1 mg/L to 2130 mg/L.
- Grab samples of COD ranged from 0 mg/L to 2740 mg/L.
- Oil and grease values ranged from 0 mg/L to 78 mg/L.

TABLE D–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[1] (MG/L, EXCEPT AS NOTED)

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	61	51	59.9	10.9	0.0	0.0	1220.0	161.0	7.0	4.0	47.0	22.0	1220.0	161.0
COD	64	53	151.6	86.8	0.0	0.0	2740.0	610.0	48.0	50.0	485.0	375.0	2740.0	610.0
Nitrate + Nitrite Nitrogen	52	52	0.97	0.8	0.0	0.0	19.0	12.0	0.3	0.3	2.6	2.4	19.0	12.0
Total Kjeldahl Nitrogen	53	51	2.13	1.6	0.0	0.0	19.0	10.0	1.1	1.0	7.2	6.3	19.0	10.0
Oil & Grease	54	N/A	5.9	N/A	0.0	N/A	78.0	N/A	1.3	N/A	28.0	N/A	78.0	N/A
pH (s.u.)	59	N/A	N/A	N/A	4.4	N/A	9.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	63	54	0.4	0.3	0.0	0.0	3.7	1.8	0.1	0.2	1.7	1.3	3.7	1.8
Total Suspended Solids	63	54	287	165	0.0	1	3870	2130	93	46	1330	860	3870	2130

[1] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. However, the values were generally low.

The Agency believes that TSS (only at asphalt facilities), COD, and oil and grease may be parameters of concern at asphalt facilities and lubricant manufacturers:

- *Total Suspended Solids (TSS)*—Outdoor storage of piles of aggregate or asphalt may contribute a high concentration of TSS to storm water discharges. The inorganic components of TSS may include sand, silt, and clay. A fraction of organic TSS, in the form of oil and grease, may result from asphalt piles and vehicle maintenance. Because suspended solids increase the turbidity of water, less light is able to penetrate the water, reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits may also blanket and destroy spawning grounds for fish. The limited data submitted with part 2 of the application process indicate a wide range of minimum and maximum TSS values (0.0 to 3,870 mg/L for grab samples and 1.0 to 2,130 mg/L for flow-weighted composite samples).

The raw materials and finished products potentially exposed at lubricant manufacturers do not typically contain high levels of TSS. In addition, activities which can contribute high levels of TSS to storm water discharges, such as soil disturbing activities or outdoor stockpiling of aggregate, are not common at lubricant manufacturing facilities.

- *Chemical Oxygen Demand (COD)*—COD measures the total amount of oxygen necessary to oxidize compounds in water. The data submitted with the part 2 group applications indicated relatively high levels of COD in storm water runoff. The mean value for 64 grab samples was 152 mg/L, for 53 composite samples, 87 mg/L.

[53] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining

At asphalt facilities significant levels of COD in the storm water discharges may result from contact with asphalt piles or other asphalt products.

At lubricating manufacturing facilities, handling of oils and other lubricants may lead to spills which can come into contact with storm water. There is also a potential for materials such as waste oils and waste solvents to be exposed to storm water, in turn contributing significant levels of COD to storm water discharges.

• *Oil and Grease*—Statistically summarized grab samples of oil and grease indicated a mean of 5.9 mg/L and a range of minimum and maximum oil and grease values from 0 to 78 mg/L. Although the mean value for oil and grease is not extremely high, EPA believes that the nature of industrial activities and potential significant materials exposed at asphalt facilities and lubricant manufacturers warrants special consideration of sources of oil and grease at these facilities.

For example, sources of oil and grease from asphalt facilities include vehicle maintenance activities and stockpiles of asphalt materials. At lubricant manufacturing facilities, potential sources include spills of oils and lubricants during loading and unloading, and storage of raw materials and finished products outside.

Water impacted by oil and grease from onsite machinery and materials may exhibit an oxygen demand. Oil and grease emulsions are also detrimental to aquatic organisms and inhabitants because: (1) Deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology (BCT)]. This section establishes requirements for the development and implementation of a site-specific storm water pollution prevention plan consisting of a set of BMPs that are sufficiently flexible to address different sources of pollutants at different sites.

Two types of BMPs which may be implemented to prevent, reduce or eliminate pollutants in storm water discharges are those which minimize exposure (e.g., covering, curbing, or diking) and treatment type BMPs which are used to reduce or remove pollutants in storm water discharges (e.g., oil/water separators, sediment basins, or detention ponds). EPA believes exposure minimization is an effective practice for reducing pollutants in storm water discharges from asphalt facilities and lubricant manufacturers. Exposure minimization practices lessen the potential for storm water to come in contact with pollutants. These methods are often uncomplicated and inexpensive. They can be easy to implement and require little or no maintenance. EPA also believes that in some instances more resource intensive treatment type BMPs are appropriate to reduce pollutant levels such as suspended solids and oil/grease in storm water discharges associated with asphalt facilities or lubricant manufacturers. Though these BMPs are somewhat more resource intensive, they can be effective in reducing pollutant loads and may be necessary depending on the type of discharge, types and concentrations of contaminants, and volume of flow.

Table D–3 lists some BMPs which may be effective in limiting the amount of pollutants in storm water discharges from asphalt facilities and lubricant manufacturers. Based on part 1 information, several of the BMPs suggested are already in place at many of the facilities. Part 1 submittals indicate that diking, curbing, or other types of diversion occur at approximately 57 percent of the facilities. 25 percent of the facilities noted that they use some form of covering as a BMP, and detention ponds are in place at 19 percent of the facilities. In addition, 38 percent of the facilities submitting part 1 information reported they had a Spill Prevention Control and Countermeasure Plan in place.

TABLE D–3.—MEASURES TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES FROM ASPHALT FACILITIES AND LUBRICANT MANUFACTURERS

Activity	Suggested BMPs
Asphalt Facilities and Lubricant Manufacturers	
Material Storage, Handling, and Processing	Cover material storage and handling areas with an awning, tarp or roof. Practice good stockpiling practices such as: storing materials on concrete or asphalt pads; surrounding stockpiles with diversion dikes or curbs; and revegetating areas used for stockpiling in order to slow runoff.
	Use curbing, diking or channelization around material storage, handling and processing areas to divert runon around areas where it can come into contact with material stored or spilled on the ground.
	Utilize secondary containment measures such as dikes or berms around asphalt storage tanks and fuel oil tanks.
	Use dust collection systems (i.e., baghouses) to collect airborne particles generated as a result of material handling operations or aggregate drying.
	Properly dispose of waste materials from dust collection systems and other operations.
	Remove spilled material and dust from paved portions of the facility by shoveling and sweeping on a regular basis.
	Utilize catch basins to collect potentially contaminated storm water.
	Implement spill plans to prevent contact of runoff with spills of significant materials.

TABLE D–3.—MEASURES TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES FROM ASPHALT FACILITIES AND LUBRICANT MANUFACTURERS—Continued

Activity	Suggested BMPs
	Clean material handling equipment and vehicles to remove accumulated dust and residue. Use a detention pond or sedimentation basin to reduce suspended solids. Use an oil/water separator to reduce oil/grease.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with facilities in this category.

4. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from asphalt facilities and lubricant manufacturers. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology, the environmental setting of each facility, and volume and type of discharge generated. This flexibility is necessary because each facility will be unique in that the source, type and volume of contaminated surface water discharges will differ from site to site.

All facilities subject to this section must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of asphalt facilities and lubricant manufacturers to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provide a flexible framework for the development and implementation of site specific controls to minimize pollutants in storm water discharges. This is consistent with the approach in EPA's storm water baseline general permits finalized on September 9, 1992 (57 FR 41236).

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility. Specific requirements for a pollution prevention plan for asphalt facilities and lubricant manufacturers are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

(1) Description of potential pollution sources. There are no additional requirements beyond those described in Part VI.C.2. of this fact sheet.

(2) Measures and controls. There are no additional requirements beyond those described in Part VI.C.3. of this fact sheet.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) Confirm the accuracy of the description of potential pollution sources contained in the plan; (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of today's proposed permit. Comprehensive site compliance evaluations should be conducted twice a year for asphalt facilities and lubricant manufacturers. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Comprehensive site compliance evaluations should be conducted at least once at portable plant locations.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

For portable plants, the plan must be revised as appropriate as soon as possible, but no more than 2 weeks after each inspection.

5. Numeric Effluent Limitations

Part XI.D.4 of today's proposed permit established numeric effluent limitations for storm water discharges resulting from the production of asphalt paving and roofing emulsions. Discharges from areas where production of asphalt paving and roofing emulsions occurs may not exceed a TSS concentration of 23.0 mg/L of runoff for any one day, nor shall the average of daily values for 30 consecutive days exceed a TSS concentration of 15.0 mg/L of runoff. Oil and grease concentrations in storm water discharges from these areas may not exceed 15.0 mg/L of runoff for any 1 day, nor should the average daily values for 30 consecutive days exceed an oil and grease concentration of 10.0 mg/L of runoff. The pH of these discharges must be within the range of 6.0 to 9.0. Facilities with such discharges must be in compliance with these effluent limitations upon commencement of coverage and for the entire term of the permit. These effluent limitations are in accordance with 40 CFR 443.12 and 40 CFR 443.13, Effluent Guidelines and Standards, Paving and Roofing Materials Point Source Category, Asphalt Emulsion Subcategory. These limitations represent the degree of effluent reduction attainable by the application of best practicable control technology and best available technology.

6. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the

industrial activities and materials exposed to precipitation, does not support sampling (except for those parameters that have numeric effluent limitations—Parts VIII.D.5. and VIII.D.6.b.) at asphalt paving and roofing materials manufacturers and lubricant manufacturers. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized.

Quarterly visual inspections of a storm water discharge from each outfall are required at asphalt facilities and lubricant manufacturers. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

b. Compliance monitoring requirements. Today's proposed permit requires permittees with storm water discharges associated with the production of asphalt paving or roofing emulsions to monitor for the presence of total suspended solids, oil and grease, and for pH. These monitoring requirements are necessary to evaluate compliance with the numeric effluent limitation proposed for these discharges. EPA requests comment upon the appropriateness of proposed monitoring frequency for these discharges. Monitoring shall be performed upon a minimum of one grab sample. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. The permittee shall include a description of the location of the outfalls, an explanation of why outfalls are expected to discharge substantially identical effluents, and an estimate of the size of the drainage area and runoff coefficient with the monitoring results. Monitoring results shall be submitted Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the month following collection of the sample. Facilities which discharge through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must also submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.D.5. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, asphalt facilities and lubricant manufacturers must monitor their storm water discharges at least annually (1 time per year) except as provided in Part VI.A.7. (Sampling Waiver). Portable plant facilities which are located at a site 3 months or more are required to monitor their storm water discharges.

Asphalt facilities must monitor storm water discharges for Total Suspended Solids (TSS), Chemical Oxygen Demand (COD), pH, and oil and grease. These monitoring requirements are summarized in Table D–4 below.

TABLE D–4.—MONITORING REQUIREMENTS FOR ASPHALT FACILITIES

Parameter	Unit	Frequency	Sample/ type
Total Flow	MG	Annual	Estimate.
Total Suspended Solids (TSS)	mg/L	Annual	Grab.
Chemical Oxygen Demand (COD)	mg/L	Annual	Grab.
pH	s.u	Annual	Grab.
Oil and Grease	mg/L	Annual	Grab.
Duration	Hrs	Annual	Estimate.
Rainfall Measurements	Inches	Annual	Estimate.
Duration Between Storm Events	Hrs	Annual	Estimate.
Total Volume of Discharge	Gallons	Annual	Estimate.

Lubricant manufacturers must monitor storm water discharges for COD, pH, and oil and grease. These monitoring requirements are summarized in Table D–5 below.

TABLE D–5.—MONITORING REQUIREMENTS FOR LUBRICANT MANUFACTURERS

Parameter	Unit	Frequency	Sample/ type
Total Flow	MG	Annual	Estimate.
Chemical Oxygen Demand (COD)	mg/L	Annual	Grab.
pH	s.u	Annual	Grab.
Oil and Grease	mg/L	Annual	Grab

The facilities identified above are not required to submit monitoring results, unless required in writing by the Director. However, such permittees must retain monitoring results in accordance with Part VI.E.4 (Retention of Records). In addition to the parameters listed below, the permittee shall record the following:

- Estimate of the flow of the discharge sampled;
- Date and duration (in hours) of the storm event(s) sampled;
- Rainfall measurements (in inches) of the storm event which generated the sampled runoff;
- Duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;
- Estimate of the total volume (in gallons) of the each discharge sampled.

b. Sample type. Facilities covered by this permit must only collect and analyze a grab sample from their storm water discharges. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Visual inspection requirements. All asphalt facilities will be required to conduct quarterly visual inspections of their discharges for sediment, oil and grease, and other visible signs of contamination. The facility will establish a record of visual observations that will be kept with the pollution prevention plan. In the event a facility observes a discharge with oil and grease or other reportable hazardous substance in excess of a reportable quantity (see 40 CFR parts 110, 117, or 302), the facility will document preventative and corrective actions taken to minimize the potential for recurrence. This permit does not relieve permittees of the reporting requirements of 40 CFR part 117 and 40 CFR part 302.

E. Storm Water Discharges Associated With Industrial Activity From Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from eleven categories of facilities. Category (ii) identifies facilities classified as Standard Industrial Classification (SIC) code 32, as having storm water discharges associated with an industrial activity.

The following section describes the industrial activities and proposed permit conditions for storm water discharges associated with industrial activity classified under Major SIC Group 32. The discussion focuses on the industries covered by today's proposed permit. There are industries in Major SIC Group 32 beyond those discussed below; however, representatives of these industries did not choose to participate in the group application process on which this section is based.

1. Discharges Covered Under This Section.

This section only covers storm water discharges associated with industrial activities from facilities engaged in gypsum, cement, clay, glass, and concrete products manufacturing.[54] Facilities subject to the requirements of this section include the following types of manufacturing operations:

- Flat Glass, (SIC Code 3211);
- Glass Containers, (SIC Code 3221);
- Pressed and Blown Glass, Not Elsewhere Classified, (SIC Code 3229);
- Hydraulic Cement, (SIC Code 3241)
- Brick and Structural Clay Tile, (SIC Code 3251);
- Ceramic Wall and Floor Tile, (SIC Code 3253);
- Clay Refractories, (SIC Code 3255);

[54] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings.

- Porcelain Electrical Supplies, (SIC Code 3264);
- Pottery Products, (SIC Code 3269);
- Concrete Block and Brick, (SIC Code 3271);
- Concrete Products, Except Block and Brick (SIC Code 3272);
- Ready-Mix Concrete, (SIC Code 3273);
- Gypsum Products, (SIC Code 3275);
- Minerals and Earths, Ground or Otherwise Treated, (SIC Code 3295);
- Nonclay Refractories, (SIC Code 3297).

Storm water discharges covered by this section are discharges where precipitation and storm water runon come into contact with significant materials including, but not limited to, raw materials, waste products, by-products, stored materials, fuels, and areas used for bagging and packaging operations. This includes storm water discharges from access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility. Wash waters from vehicle and equipment cleaning areas are process wastewaters. This section does not cover any storm water that combines with process wastewater, unless the process wastewater is in compliance with another NPDES permit. This section does not cover any discharge subject to an existing or expired NPDES general permit. The section may cover runoff which derives from the storage of materials used in or derived from the cement manufacturing process[55] unless storm water discharges are already subject to an existing or expired NPDES permit.

Discharges from several industrial activities in Major SIC Group 32 are not covered by this section. These activities are:

- Lime manufacturing (SIC 3274)
- Cut stone and stone products (SIC 3281)
- Abrasive Products (SIC 3291)
- Asbestos Products (SIC 3292)
- Mineral Wool and Mineral Wool Insulation Products (SIC 3297).

These types of facilities are not covered by this (or any other) section of today's proposed permit, because these types of industrial activities were not represented in the group application process nor are they believed to be sufficiently similar to industrial activities that were included in the group application process. Because these facilities were not included in the group application process there is no additional information with which to develop industry-specific permit language.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

a. Industry profile. Part XI.E. of today's proposed permit has been developed for storm water discharges from glass, clay, cement, concrete, and gypsum products manufacturers. As stated above, these facilities are regulated under category (ii) of the definition of storm water discharges associated with industrial activity. Part XI.E. of today's proposed permit addresses the industry-specific proposed permit requirements for storm water discharges from these industries.

There are a variety of industrial processes that occur at manufacturing facilities covered under this section. The following descriptions summarize basic operations occurring at each type of industry.

(1) Glass product manufacturing. Facilities primarily engaged in the manufacturing of glass and glassware, or manufacturing glass products from purchased glass are classified under standard industrial groups 321–323. Facilities covered by these SIC codes share several similar steps in the manufacturing process. Such processes include the storage of raw materials, weighing the materials, charging, melting and forming. Although the forming processes vary greatly, the steps with a potential exposure to storm water are somewhat homogeneous.

The first step in the glass manufacturing process is batch preparation. This involves the selection and storage of the raw materials that will be used in the process. Such materials may include silica sand, limestones, feldspars, borates, soda ash, boric acid, potash and barium carbonate. Once the desired characteristics of the final product are assessed, the composition of the batch is determined and the raw materials are mixed together. The batch is then conveyed to the furnaces.

Furnaces are used to melt the batch to produce glass. Most of the furnaces in the glass manufacturing industry are fueled by natural gas or oil. The batch is placed in the furnace and allowed to melt. Once the glass has been melted and conditioned it is channeled to a forming machine.

Forming operations consist of up to four major steps, the first of which involves a further conditioning process to prepare the glass for primary forming. Primary forming, which may include drawing, blowing, pressing, or casting, is the second step in the forming operation. This operation is usually followed by an annealing step. Annealing is the process of subjecting the glass to heat and slow cooling in order to toughen the product. The final process in the forming operation may include one or more secondary operations. Operations such as grinding and polishing, laminating, sealing and coating of glass are common secondary operations. Materials used for secondary operations vary, examples are the resins used to laminate glass to produce safety glass products, such as car windows.

(2) Cement manufacturing. Facilities primarily engaged in manufacturing hydraulic cement (e.g., portland, natural, masonry, and pozzolana cements) are identified as SIC code 3241. The manufacturing process is generally the same for all facilities classified as SIC 3241. The three basic steps in cement manufacturing are: (1) Proportioning, grinding, and blending raw materials; (2) heating raw materials to produce a hard, stony substance known as "clinker"; and (3) combining the clinker with other materials and grinding the mixture into a fine powdery form.

The first step in cement manufacturing is proportioning, grinding and blending raw materials. The primary raw material is lime. Lime is typically obtained from limestone, cement rock, oyster shell marl, and chalk. Other ingredients in cement manufacturing may include silica, alumina, and iron. The blending and grinding of these raw materials is

[55] These discharges are subject to effluent limitation guidelines under 40 CFR 412.11.

achieved through either "wet" processing or "dry" processing. Wet processing operations use water when grinding and blending raw materials, and dry processing operations grind and blend raw materials in a dried state. Until they are fed into kilns for clinker production, materials ground from wet processing are stored in slurry tanks, while dry processing materials are stored in silos.

Kilns typically are coal, gas, or oil fired. In the kiln raw materials are commonly heated to a temperature of 1600 degrees Celsius (2900 degrees Fahrenheit). At these extreme temperatures, clinker is formed as raw materials begin to fuse and harden. Air is then used to cool clinker emerging from the kiln.

The final stage of the process involves adding small amounts of gypsum or stone (used to control setting times) to the clinker and grinding the mixture into a fine powdery form. The powdery product is then cooled before storage, bagging, and shipping.

There are facilities classified as SIC 3241 with industrial activities focussed only on producing cement as a final product. These facilities do not have kilns to heat raw materials, and so obtain clinker from manufacturing plants. Once in possession of the clinker, these facilities follow the final stage of cement manufacturing, as described above.

(3) Clay product manufacturing. Facilities primarily engaged in manufacturing clay products, including brick, tile (clay or ceramic), or pottery products are classified as standard industrial groups 325 and 326. Although clay product manufacturing facilities produce a wide variety of final products, there are several similar processing steps shared by most facilities in this industry: (1) storage and preparation of raw materials; (2) forming; (3) drying; (4) firing; and (5) cooling.

Manufacturers classified as standard industrial groups 325 and 326 typically use clay (common, silt, kaolin and/or phyllite) and shale (mud, red, blue and/or common) as their primary raw materials. However, some industries supplement these materials with slag (cinders), cement and lime. Raw materials are generally stored outside.

Raw materials are crushed and ground prior to manufacturing. Stones are removed, and particles of raw materials are screened to ensure they are the correct size. Water is then added to raw materials in mixing chambers and "mud" is formed. The mud is molded into the desired product during the forming stage. Depending on the final product, one of several different methods will be used when forming mud into the desired shape. The most common methods use pressure or hydraulic machines to shape products.

Following the forming process, products are left to dry. Drying is necessary to reduce the moisture content prior to firing. A common method for reducing moisture content is air drying clay products in a controlled environment (e.g., a drying chamber). When the drying process is complete, the clay is ready for firing in kilns.

There are two basic types of kilns: the periodic kiln and the tunnel kiln. With a periodic kiln, products are fired for a specified period of time and then promptly removed. With a tunnel kiln, products pass through the kiln on conveyor belts, and by the time the clay reaches the end of the kiln, the firing process is complete. The primary source of energy for most firing kilns is natural gas. Natural gas is typically supplemented with coal, sawdust, or oil. Fired products may then be glazed with salt or other materials for special applications.

(4) Concrete products. Facilities primarily engaged in manufacturing concrete products, including ready-mixed concrete, are identified as SIC group 327. Although concrete product facilities in SIC group 327 produce a variety of final products, they all have common raw materials and activities.

Concrete products manufacturers combine cement, aggregate, and water to form concrete. Aggregate generally consists of: sand, gravel, crushed stone, cinder, shale, slag, clay, slate, pumice, vermiculite, scoria, perlite, diatomite, barite, limonite, magnetite, or ilmenite. Admixtures including fly ash, calcium chloride, triethanolamine, calcium salt, lignosulfunic acid, vinosol, saponin, keratin, sulfonated hydrocarbon, fatty acid glyceride, vinyl acetate, and styrene copolymer of vinyl acetate may be added to obtain desired characteristics, such as slower or more rapid curing times.

Typically, aggregate is received in bulk quantities by rail, truck, or barge. It is stored outside, and kept moist, until it is conveyed to distribution bins. The first stage in the manufacturing process is proportioning cement, aggregate, admixtures and water, and then transporting the product to a rotary drum, or pan mixer.

To form concrete block and brick, the mixture is then fed into an automatic block molding machine that rams, presses, or vibrates the mixture into its final form. The final product is then stacked on iron framework cars where it cures for 4 hours. Decorative blocks may be produced by adding colors to the mix, or splitting the surface into desired shapes.

Precast concrete products, may contain steel structural members for increased strength. These products include transformer pads, meter boxes, pilings, utility vaults, steps, cattle guards, and balconies. After being mixed in a central mixer, concrete is poured into forms or molded in the same manner as concrete block and brick. Forms are often coated with a release oil to aid stripping. The concrete "sets" or cures in the forms for a number of hours (depending upon the type of admixtures used). When the concrete has cured, the forms are removed. Forms are washed for reuse, and the concrete products are stored until they can be shipped.

In addition to the permanent concrete product facilities, there are a number of portable ready mix concrete operations which operate on a temporary basis. The portable plants are typically dedicated to providing ready mix concrete to one construction project. Portable plants have the same significant materials and industrial activities as permanent facilities. Therefore, portable concrete plants are eligible for coverage under Part XI.E. of today's proposed permit.

(5) Gypsum products manufacturing. Facilities primarily engaged in manufacturing plaster, wallboard, and other products composed wholly or partially of gypsum (except plaster of paris and papier-mâché) are classified as SIC code 3275.

The gypsum product manufacturing process begins with calcining the gypsum: finely ground raw gypsum (referred to as "land plaster") is fed into imp mills or calcining kettles where extreme heat removes 75 percent of the gypsum's molecular moisture. The result is a dry powder called stucco, which is cooled and conveyed to storage bins.

To produce wallboard, stucco is fed into pin mixers where it is blended with water and other additives to produce a slurry. The slurry is then applied to continuous sheets of paper to form wallboard. In addition to producing wallboard, some facilities may combine stucco with additives (excluding water) to produce plaster. Plaster is then bagged or bulked and shipped off site for purchase.

EPA considers calcining the first step in gypsum product manufacturing. Many facilities with a primary SIC code of 3275 may have mining/quarry and crushing activities at their sites. Please note, however, that because these activities are not considered part of the manufacturing operations, storm water

discharges from mining/quarry and crushing are not covered under Part XI.E. of today's proposed permit. Discharges associated with gypsum mining activities are addressed under Part XI.J. of today's proposed permit and VIII.J. of the fact sheet.

2. Pollutants in Storm Water Discharges Associated With Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing

Impacts caused by storm water discharges from gypsum, concrete, clay, glass, and concrete manufacturing operations will vary. Several factors influence to what extent industrial activities and significant materials from these types of facilities and processing operations can affect water quality. Such factors include: geographic location; hydrogeology; the type of industrial activity occurring outside (e.g., material storage, loading and unloading, or vehicle maintenance); the type of material stored outside (e.g., aggregate, limestone, clay, concrete, etc.); the size of the operation; and type, duration, and intensity of precipitation events. These and other factors will interact to influence the quantity and quality of storm water runoff. For example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities, while material storage is a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,[56] spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Table E–1, Potential Sources of Pollutants in Storm Water Discharges Associated with Glass, Clay, Cement, Concrete, and Gypsum Manufacturing, summarizes the industrial activities indicated in the part 1 group applications for facilities covered under this section of today's proposed permit. Table E–1 also lists the likely sources of contamination of storm water that are associated with this activity. The third column of the table lists the pollutants or the indicator parameters for the pollutants which may be present in the storm water discharges associated with the industrial activity. The table is limited to the industrial activities which are commonly exposed to storm water. Industrial activities which predominantly occur indoors, such as glass forming, are not listed in Table E–1.

TABLE E–1.—POTENTIAL SOURCES OF POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM MANUFACTURING

Activity	Pollutant source	Pollutants/indicators
Material Storage at Glass Manufacturing Facilities.	Exposed: sand, soda ash, limestone, cullet, and petroleum products.	TSS, COD, oil and grease, pH, lead.
Material Handling at Glass Manufacturing Facilities.	Spilled: sand, soda ash, limestone, cullet, and petroleum products.	TSS, pH, COD, oil and grease, lead.
Materials Storage at Clay Products Manufacturing Facilities.	Exposed: ceramic parts, pryophyllite ore, shale, ball clay, fire clay, kaolin, tile, silica, graphite, coke, coal, brick, sawdust, waste oil, and used solvents.	TSS, pH, COD, oil and grease, aluminum, lead, zinc.
Material Handling at Clay Products Manufacturing Facilities Including: Loading/Unloading.	Exposed: ceramic parts, liquid chemicals, ammonia, waste oil, used solvents, pryophyllite ore, shale, ball clay, fire clay, kaolin, tile, alumina, silica, graphite, coke, coal, olivine, magnesite magnesium carbonate, brick, sawdust, and wooden pallets.	TSS, pH, oil and grease, TKN, COD, BOD, aluminum, lead, zinc.
Forming/Drying Clay Products	Clay, shale, slag, cement, and lime	TSS, pH.
Material Storage at Cement Manufacturing Facilities.	Exposed: kiln dust, limestone, shale, coal, clinker, gypsum, clay, slag, and sand.	TSS, pH, COD, potassium, sulfate.
Material Handling at Cement Manufacturing Facilities.	Exposed: kiln dust, limestone, shale, coal, clinker, gypsum, clay, slag, anhydrite, and sand.	TSS, pH, COD, potassium, sulfate, oil and grease.
Crushing/Grinding at Cement Manufacturing Facilities.	Settled dust and ground limestone, cement, oyster shell, chalk, and clinker.	TSS, pH.
Material Storage at Concrete Product Manufacturing Facilities.	Exposed: aggregate (sand and gravel), concrete, shale, clay, limestone, slate, slag, and pumice.	TSS, COD, pH.
Material Handling at Concrete Product Manufacturing Facilities.	Exposed: aggregate, concrete, shale, clay, slate, slag, pumice, and limestone as well as spills or leaks of cement, fly ash, admixtures and baghouse settled dust.	TSS, COD, pH, lead, iron, zinc.
Mixing Concrete	Spilled: aggregate, cement, and admixture	TSS, pH, COD, lead, iron zinc.
Casting/Forming Concrete Products	Concrete, aggregate, form release agents, reinforcing steel, latex sealants, and bitumastic coatings.	TSS, pH, oil and grease, COD, BOD.
Vehicle and Equipment Washing at Concrete Product Manufacturing Facilities.	Residual: aggregate, concrete, admixture, oil and grease.	TSS, pH, COD, oil and grease.
Crushing/Grinding of Gypsum Rock	Exposed or spilled: gypsum rock and dust	TSS, pH.
Material Storage at Gypsum Manufacturing Facilities.	Exposed: gypsum rock, synthetic gypsum, recycled gypsum and wallboard, stucco, perlite ore/expanded perlite, and coal.	TSS, COD, pH.

[56] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings.

TABLE E–1.—POTENTIAL SOURCES OF POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM MANUFACTURING—Continued

Activity	Pollutant source	Pollutants/indicators
Material Handling at Gypsum Manufacturing Facilities (including bagging and packaging).	Exposed or spilled: gypsum rock, synthetic gypsum, recycled gypsum and wallboard, stucco, perlite ore/expanded perlite, and coal.	TSS, pH, COD.
Equipment/Vehicle Maintenance	Gasoline, diesel, fuel, and fuel oil	Oil and grease, BOD, COD.
	Parts cleaning	COD, BOD, oil and grease, pH.
	Waste disposal of solvents, oily rags, oil and gas filters, batteries, coolants, and degreasers.	Oil and grease, lead, iron, zinc, aluminum, COD, pH.
	Fluid replacement including lubricating fluids, hydraulic fluid, oil, transmission fluid, radiator fluids, solvents, and grease.	Oil and grease, arsenic, lead, cadmium, chromium, COD, and benzene.

The activities common to the facilities covered under Part XI.E. of today's proposed permit are material storage and material handling operations. All facilities covered under this section handle and store nonmetallic minerals. These minerals are typically loaded and unloaded in areas of the site that are exposed to storm water. The minerals are often stored outdoors until they are utilized in the industrial processes. Handling and storing these minerals outdoors may result in the discharge of a portion of the materials in storm water runoff. The presence of the nonmetallic minerals in the storm water is measured by the total suspended solids (TSS) test. Many of the minerals processed by the facilities are calcareous, such as limestone or chalk. The presence of these materials can elevate the pH of the storm water discharged from the site.

Vehicle fueling, repair, maintenance and cleaning occurs at many facilities covered under this section. Facilities will fuel, repair and maintain vehicles used to transport significant materials to, from or around the facility. Facilities may also perform maintenance on process or material handling equipment such as mixers or conveyors. The fueling, maintenance and repair activities may result in leaks or spills of oil from the vehicles and equipment. The spilled material may be carried off of the site in the storm water discharge.

Ready mix concrete facilities will frequently wash out the mixers of the trucks after concrete has been delivered to a job site. The wash out water contains unhardened concrete. Facilities will often wash down the exterior of their vehicles. The wash off water may contain cement, sand, gravel, clay, or other materials. The wash water from the vehicles should be either treated and discharged from the site through a sanitary sewer or NPDES permitted discharge or collected in a recycle pond where the heavy solids settle out and the water is recycled back to be used in the plant. Pollutants from the wash water may settle out on the site before it is treated or recycled. These pollutants may come into contact with storm water and be discharged from the site.

Table E–2 indicates the statistically summarized conventional pollutant sampling data for the glass, cement, clay, concrete, and gypsum manufacturing facilities that submitted part 2 data to EPA prior to January 1, 1993. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. Large variations in the minimum and maximum values were often found for each of the eight conventional pollutants monitored.

Based upon a review of the data contained in applications, EPA has concluded that there are several pollutant parameters of concern for the storm water discharges associated with the industrial activities covered under this section of today's proposed permit. The pollutants of concern are: total suspended solids, aluminum, copper, iron, and zinc.

TABLE E–2.—SUMMARY OF POLLUTANTS IN STORM WATER DISCHARGES FROM GLASS, CEMENT, CLAY CONCRETE, AND GYPSUM PRODUCT MANUFACTURING FACILITIES[i, ii]

(mg/L, except as noted)

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[iii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	310	300	14.3	7.3	0.0	0.0	1300.0	120.0	5.0	4.2	32.0	26.0	96.0	56.5
COD	313	302	107.5	77.5	0.0	0.0	2230.0	911.0	51.3	45.2	317.0	240.0	955.0	512.0
Nitrate + Nitrite Nitrogen	303	292	2.0	1.4	0.0	0.0	260.0	145.0	0.6	0.6	5.03	3.0	11.7	17.5
Total Kjeldahl Nitrogen	304	292	3.81	2.37	0.0	0.0	450.0	250.0	1.15	1.0	7.0	5.0	25.0	17.3
Oil & Grease	315	N/A	4.7	N/A	0.0	N/A	130.0	N/A	1.4	N/A	17.1	N/A	59.4	N/A
pH (s.u.)	297	N/A	N/A	N/A	2.0	N/A	12.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	313	300	1.21	0.57	0.00	0.00	34.50	20.40	0.58	0.25	4.96	3.24	18.0	13.8
Total Suspended Solids	311	302	1067	388	0.0	0.0	61000	13400	200	149	2920	1440	17085	2510
Aluminum	13	12	72.6	96.87	.15	0.0	900	1100	3.1	1.6	900	1100	900	1100
Copper	6	5	.131	.16	0.0	0.0	.4	.4	.019	.041	.4	.4	.4	.4
Iron	11	11	7.57	5.216	.118	.13	29	14	3.48	4.1	29	14	29	14
Zinc	8	7	.354	.389	.02	.021	1.17	1.12	.137	.18	1.17	1.12	1.17	1.12

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] All parameters reported as nondetect (ND) were assumed to be 0.0.
[iii] Composite samples.

• *Total Suspended Solids (TSS)*—TSS is a measure of the solid material suspended in the storm water. As indicated in Table E–1, TSS can be introduced to storm water by all of the exposed industrial activities which occur at facilities covered under this section of today's proposed permit. The significant materials utilized by this industry are primarily dry granular or powder-like materials that can be washed away by storm water runoff. The median concentration for grab samples collected from discharges associated with the type of facilities covered by this section was 200 mg/L. The median concentration for composite samples was 149 mg/L. These discharge concentrations are about three to four times higher than the 50 mg/L effluent limitation guidelines established by EPA for runoff from material storage piles at cement manufacturing facilities.[57]

• *Chemical Oxygen Demand (COD)*—COD is a measure of the content of organic matter which will oxidize in a strong acid. The potential sources of the COD in storm water runoff from facilities covered under this section are leaked or spilled fuel, oil or grease from the vehicles and other equipment utilized in the material handling and processing activities. The other potential source of pollutants are leaked or spilled admixtures used in the production of ready mix concrete. The median concentration of COD in storm water grab samples collected from facilities covered under this section of today's proposed permit was 51.3 mg/L. The median concentration in storm water composite samples was 43.2 mg/L.

• *pH*—pH is a measure of the degree to which a solution is acidic or basic. The pH of storm water discharges from facilities covered under this section can be increased by contact with calcareous materials such as limestone. Thirty percent of the grab samples collected from storm water discharges had a pH that was higher than 9.0, which is the upper effluent limitation guideline established by EPA for runoff from material storage piles at cement manufacturing facilities.[58] The highest observed pH was 12.3.

The remaining conventional pollutants are not believed to be of concern for storm water discharges from this industry. Biochemical Oxygen Demand (BOD), the measure of the oxygen required by microorganisms to break down pollutants, is not a parameter of concern because the significant materials used in these industries are not biodegradable. The median concentrations of 5-day BOD were 5.0 mg/L in grab samples and 4.2 mg/L in composite samples. Based upon the data provided in the group application process nutrients, nitrogen and phosphorus, are not pollutants of concern in storm water discharges from glass, clay, cement, concrete or gypsum manufacturing facilities. The significant materials handled at these facilities do not contain a high amount of nitrogen or phosphorus. As indicated in Table E–2, the concentration of Total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and phosphorus are low. The mean concentration of these parameters in composite samples of storm water discharges from Major SIC Group 32 facilities is similar to the average concentration of samples collected from storm water discharges from residential or commercial areas.[59]

Based upon the data provided, oil and grease is not a pollutant of concern for this industry. Oil and grease is a method used to determine the amount of material within a sample that is soluble in an organic extracting solvent. The test measures the amount of petroleum hydrocarbons within a sample, but it can also measure the presence of chlorophyll, organic dyes or certain sulfur compounds.[60] The expected sources of oil and grease at facilities covered under this section of today's proposed permit are leaks and spills from process equipment and vehicles, and from form releasing agents.

Potassium and sulfate are pollutants found in the storm water discharges from the cement manufacturing industries. These pollutants are present in the raw materials used in cement manufacturing and are found in the kiln dust. Several facilities submitted sampling data for sulfate. The concentration of sulfate in the composite samples ranged from 12.1 mg/L to 1,340 mg/L. The concentration of sulfate in grab samples ranged from 0 mg/L to 1,450 mg/L. Sampling data on the concentration of potassium in storm water discharges was not submitted by the group participants. Potassium and sulfate are not considered to be parameters of concern for the entire industry sector. The data submitted indicate that most facilities do not have reason to believe these parameters are present in their storm water discharges.

The remaining pollutants found in storm water discharges from glass, clay, cement, concrete, or gypsum manufacturing facilities are the metals: aluminum, iron, lead and zinc. A small portion of the facilities did submit data for these parameters, and the metals listed above were found in a few storm water discharges in concentrations greater than the respective acute fresh water quality criteria.[61] There are a number of potential sources for these metals including: the raw materials such as clay, slag, cinders, and fly ash; and the vehicle maintenance areas.

The discharge information data presented in Table E–2 is based upon incomplete application data. A large portion of the groups were unable to submit the required sampling data to EPA by October 1, 1992. Table E–2 does not distinguish between data collected from the distinct types of industrial activities included in Major SIC Group 32.

Because of the variety of industrial activities which are classified under Major SIC Group 32, EPA has grouped and examined the data submitted by industry sub-sector. One sub-sector, the glass product manufacturing sub-sector, demonstrated a significantly smaller potential for contamination of storm water than the other industries in Major SIC Group 32. Storm water discharges from the glass manufacturing segment have generally lower concentrations of TSS and COD. The pH of the storm water discharges for the glass manufacturing industry tended to be lower than the sector as a whole. EPA believes this is due to the lower amount of industrial activity exposed to storm water for the glass industry in comparison to the other industries under Major SIC Group 32.

3. Options for Controlling Pollutants

There are a number of options for eliminating or minimizing the presence of pollutants in storm water discharges from glass, clay, cement or concrete product manufacturing facilities. In evaluating the options for controlling pollutants in the storm water discharges associated with the industrial activities covered under this section, EPA must comply with the requirements of Section 402(p)(3) of the Clean Water Act which require the compliance with the Best Available Technology (BAT) and Best Conventional Technology (BCT).

EPA believes that it is infeasible to develop effluent limitations for storm

[57] 40 CFR part 412. "Effluent Guidelines and Standards, Cement Manufacturing Point Source Category."

[58] 40 CFR part 412 "Effluent Guidelines and Standards, Cement Manufacturing Point Source Category."

[59] From "Results of the Nationwide Urban Runoff Program, Vol. 1- Final Report," EPA 1983.

[60] "Standard Methods for the Examination of Water and Wastewater," 18th ed., APHA, AWWA, and WEF, 1992.

[61] "Quality Criteria for Water," 1986 (EPA 440/5–86–001) EPA Office of Water, May 1987.

water discharges associated with glass, clay, cement, or concrete manufacturing beyond those already established in the Effluent Limitation Guidelines. There are significant variations from site to site on the industrial activity and significant materials exposed to storm water. The data collected to date is inadequate to characterize these variations. Therefore, EPA believes that the requirement for a facility operator to develop a pollution prevention plan which considers the specific conditions at his or her site satisfies the BAT/BCT requirements. The pollution prevention plan will call for the implementation of best management practices that minimize contact between the storm water and pollutant sources or which remove pollutants from the storm water before it is discharged from the site. Table E–3 lists the pollution prevention measures or best management practices which are most applicable to facilities classified in major SIC Group 32. The table is organized by the specific industrial activities which may introduce pollutants to storm water. The right column lists corresponding BMPs which may be introduced.

TABLE E–3.—MEASURES TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES FROM GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM FACILITIES[1]

Activity	Associated BMPs
Storing dry bulk materials including: sand, gravel, clay, cement, fly ash, kiln dust, and gypsum.	Store materials in an enclosed silo or building.
	Cover material storage piles with a tarp or awning.
	Divert runon around storage areas using curbs, dikes, diversion swales or positive drainage away from the storage piles.
	Only store washed sand and gravel outdoors.
Handling bulk materials including: sand, gravel, clay, cement, fly ash, kiln dust, and gypsum.	Use dust collection systems (e.g., bag houses) to collect airborne particles generated as a result of handling operations.
	Remove spilled material and settled dust from paved portions of the facility by shoveling and sweeping on a regular basis.
	Periodically clean material handling equipment and vehicles to remove accumulated dust and residue.
Mixing operations	Use dust collection systems (e.g., bag houses) to collect airborne particles generated as a result of mixing operations.
	Remove spilled material and settled dust from the mixing area by shoveling and sweeping on a regular basis.
	Clean exposed mixing equipment after mixing operations are complete.
Vehicle and equipment washing	Designate vehicle and equipment wash areas that drain to recycle ponds or process wastewater treatment systems.
	Train employees on proper procedure for washing vehicles and equipment including a discussion of the appropriate location for vehicle washing.
	Conduct vehicle washing operation indoors or in a covered area.
	Clean wash water residue from portions of the site that drain to storm water discharges.
Dust collection	Maintain dust collection system and baghouse. Properly remove and recycle or dispose of collected dust to minimize exposure of collected dust to.
Pouring and curing pre-cast concrete products	Pour and cure precast products in a covered area.
	Clean forms before storing outdoors.

[1] From "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," (EPA 832–R–92–006) EPA, 1992, and proposed pollution prevention plans submitted by group applicants.

In addition to the activity-specific best management practices listed in Table E–3 above, there are structural practices that may be effective in reducing the pollutants found in the storm water discharges from facilities in Major SIC Group 32. This section does not specifically require that these structural measures be installed; however, the permittee must consider measures such as these at the facility. The structural measures include: vegetative filter strips, grassed swales, detention ponds, retention ponds or recycle ponds. These structural measures remove pollutants from the storm water which is carrying them off site. The measures listed above are effective in removing the heavy suspended solids which are common in the storm water discharges from clay, cement, concrete, and gypsum facilities.

Vegetated filter strips are gently sloped areas covered with either natural or planted vegetation. Vegetated filter strips remove pollutants from storm water by a filtering action. Vegetated filter strips can be located along the down slope perimeter of the industrial activity but not in areas of concentrated flow. Grassed swales are similar to vegetated filter strips. Within Major SIC Group 32, four percent of the designated sampling facilities indicated in their part 1 group applications that they had vegetated filter strips at their facilities. Grassed swales also remove pollutants from storm water flows by a filtering action. A grassed swale consists of a broad, grass lined ditch or swale with gradual slopes or check dams to reduce the velocity of flow. Unlike vegetated filter strips, grassed swales can remove pollutants from concentrated storm water runoff. Over 13 percent of the designated samplers in Major SIC Group 32 indicated that there were grass lined swales at their facility.

Retention ponds and detention ponds are storm water management measures used to control the quantity and quality of storm water discharged from a site. A detention pond is a pond which temporarily detains the storm water discharged from an area. While detained in the pond, the heavy suspended particles in the storm water settle to the bottom of the pond. The result is a discharge from the detention pond with a TSS concentration which is lower than the influent concentration to the pond. Retention ponds retain the storm water within the pond with no discharge except for when extreme rainfall events occur. The water collected in the retention pond either evaporates, infiltrates, or is used as process water on site. Twenty-seven

percent of the designated samplers in Major SIC Group 32 indicated that there was a pond on their site which was used as a storm water management measure.

4. Special Conditions

a. Prohibition of non-storm water discharges. The prohibited non-storm water discharges under this section are the same as those prohibited under the September 9, 1992, baseline general permit with one exception. Part XI.E.2. of today's proposed permit clarifies that the discharges of pavement washwaters from facilities covered under Part XI.E. of the permit are authorized under this section after the accumulated fly ash, cement, aggregate, kiln dust, clay, concrete or other dry significant materials handled at the facility have been removed from the pavement by sweeping or other equivalent measures. Where practicable pavement washwater shall be directed to process wastewater treatment or recycling systems. The clarification is made for this sector because EPA believes that a primary source of pollutants in the storm water discharges from facilities covered under this sector are spilled materials or settled dust from material handling processes. A primary focus of the pollution prevention plan requirements for these industries are good housekeeping measures, in particular, sweeping the paved portions of the site surrounding the material handling areas. Washing the paved areas without first sweeping or otherwise removing the accumulated solids may result in the discharge of these pollutants in the washwater unless the washwater is contained onsite or otherwise collected without discharge.

5. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. (1) Description of potential pollutant sources. All facilities covered by today's proposed permit must prepare a description of the potential pollutant sources at the facility which complies with the common requirements described in Part VI.C.2. of this fact sheet. In addition to these requirements, facilities covered by this section must provide the following additional information in their pollution prevention plan.

Facilities covered under Part XI.E. of today's proposed permit must identify on the site map the location of any: Bag house or other air pollution control device; any sedimentation or process waste water recycling pond and the areas which drain to the pond. The location of the bag house or air pollution control equipment is required because this equipment stores the particulates or dust that are removed from the air in and around the material handling equipment. There is a potential that the collected dust or particulates could come into contact with storm water. Therefore the site map must indicate the location of this potential source. The site map for the facility must clearly indicate the portion of the facility which drains to sedimentation or recycle ponds that receive process wastewater. This information is necessary to illustrate the portion of the site where runoff is already controlled. The site map for these facilities must also indicate the portion of the site where regular sweeping or other equivalent good housekeeping measures will be implemented to prevent the accumulation of spilled materials or settled dust.

(2) Measures and controls. Part VI.C.3. of today's fact sheet describes a number of measures and controls which are effective in controlling the discharge of pollutants in storm water discharged from a number of types of industrial activities including those facilities in Major SIC Group 32. The following section describes BMPs which EPA believes are particularly effective in controlling the pollutants discharged from glass, clay, cement, concrete or gypsum manufacturing facilities. Facilities covered under Part XI.E. are required to address each of these BMPs in their pollution prevention plan.

(a) Good housekeeping—Today's proposed permit requires that the pollution prevention plans for facilities covered under this section must specifically address measures to minimize the discharge of spilled cement, sand, kiln dust, fly ash, settled dust other significant materials in storm water from paved portions of the site that are exposed to storm water. Measures used to minimize the presence of these materials may include regular sweeping, or other equivalent measures. The plan shall indicate the frequency of sweeping or other measures. The frequency shall be determined based upon consideration of the amount of industrial activity occurring in the area and frequency of precipitation. This requirement is established in an effort to minimize the discharge of solids from these types of facilities. Sweeping to prevent the discharge of solids must be considered in the pollution prevention plan because it is a cost effective measure well suited to the dry, granular, and powder-like materials used at the facilities covered under this section.

This section also requires that facilities minimize the exposure of fine solids such as cement, fly ash, baghouse dust, and kiln dust to storm water. The pollution prevention plan shall consider storing these materials in enclosed silos, hoppers, or other containers, in buildings, or in covered areas of the facility. Fine solids are a particular concern because the small particles are readily suspended by storm water and carried off of the site.

(b) Preventative maintenance—This section requires that the storm water pollution prevention plan address the maintenance requirements for dust control systems. The facilities are required to insure that dust collection systems are properly maintained and remain in working order. There are two reasons for this requirement. The first is that poorly maintained dust collection systems are more likely to malfunction or breakdown resulting in a higher volume of discharge of airborne dust particles from the material handling and processing areas. A portion of these airborne particles may settle on the facility grounds where they potentially could be washed away during the next rain storm. A well maintained dust collection system is more likely to trap these particles before they are discharged to the air. The second reason is that the bag house or other storage device for the collected dust can overflow or spill if not adequately maintained. This spilled material may be washed off of the site in the storm water discharge from the facility. Inspection and maintenance of air pollution control equipment can improve storm water quality as well as air quality. The accumulated dust must be removed regularly.

(c) Spill prevention and response—There are no additional spill prevention and response requirements for facilities in the glass, clay, cement, concrete or gypsum products industries beyond those described in Part VI.C.3.c. of this fact sheet.

(d) Inspections—Facilities in the glass, clay, cement, concrete, and gypsum products industries are required to conduct self inspections at a frequency which they determine to be adequate to ensure proper implementation of their pollution prevention plan, but not less frequently than once per month. Monthly inspections are necessary for the facility to be able to assess the effectiveness of the pollution prevention plan. Less frequent inspections may allow facilities to delay inspections until after periods of high activity when the greatest potential for exposure of materials occurs. This section requires that the inspections take place while the facility is in operation because this is the only

time when potential pollutant sources (such as malfunctioning dust control equipment or non-storm water discharges from equipment washing operations) may be evident. The inspectors must observe several portions of the site which EPA believes are potential sources of pollutants in storm water including: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, vehicle washing, and equipment cleaning areas.

(e) Employee training—In addition to the requirements described in Part VI.C.3.e. of this fact sheet, the pollution prevention plan training requirements for facilities in the glass, clay, cement, concrete, and gypsum industries require that the employee training program address procedures for equipment and vehicle washing. This is because these are common activities in these industries which result in process wastewater which may be discharged into the storm water conveyance system. Training programs should focus on where and how equipment should be cleaned at the facility so that there will be no unpermitted discharge of wash water to the storm water conveyance system.

(f) Recordkeeping and internal reporting procedures—There are no additional recordkeeping and internal reporting procedure requirements for facilities in the stone, clay, glass or concrete products industries beyond those described in Part VI.C.3.f. of this fact sheet.

(g) Non-storm water discharges—There are no additional non-storm water discharge certification requirements for facilities in the stone, clay, glass or concrete products industries beyond those described in Part VI.C.2.d. of this fact sheet with the exception of facilities engaged in production of concrete products. These facilities must include in the certification a description of measures which insure that process wastewater which results from washing of trucks, mixers, transport buckets, forms or other equipment are discharged in accordance with NPDES requirements or are recycled. These nonprocess wastewater discharges are common to this industry. However, these discharges are not eligible for coverage under this section and it is necessary to assess the facility for the presence of these discharges so that steps may be taken to eliminate the discharges or to cover the process discharges with a separate permit.

A number of facilities in the concrete products industry maintain wash water recycle/retention ponds which receive the process wastewater from equipment cleaning and other operations. These ponds may also receive a portion or all of the runoff from the industrial site. These facilities are required to provide an estimate of the depth of the 24-hour duration storm event that would be required to cause the recycle/retention pond to overflow and discharge to the waters of the U.S. Methods to make this estimate can include but are not limited to the original design calculations for the recycle/retention pond or historical observation.

(h) Sediment and erosion control—There are no additional sediment and erosion control requirements for facilities in the stone, clay, glass, or concrete products industries beyond those described in Part VI.C.3.g. of this fact sheet.

(i) Management of runoff—There are no additional requirements for management of runoff at facilities in the stone, clay, glass, or concrete products industries beyond those described in Part VI.C.3.h. of this fact sheet.

(3) Comprehensive site compliance evaluation. Facilities in the glass, clay, cement, concrete, and gypsum product sector must perform an annual site compliance evaluation as described in Part VI.C.4. of this fact sheet. For facilities in the concrete product manufacturing industries, the evaluation must specifically address the following portions of the site: above ground storage tanks, hoppers or silos; dust collection/containment systems; truck wash down; and equipment cleaning areas. These portions of the site must be thoroughly evaluated to determine the potential for contamination of storm water which comes into contact with these areas.

6. Numeric Effluent Limitations

Part XI.E.4. of today's proposed permit establishes numeric effluent limitations for storm water discharges from storage areas for materials used or produced at cement manufacturing facilities. Discharges from these areas may not exceed a maximum TSS concentration of 50 mg/L. The pH of the discharges from these areas must be within the range of 6.0 to 9.0. Untreated discharges from the facility which are a result of a storm with a rainfall depth greater than the 10-year, 24-hour storm event are not subject to this limitation. These effluent limitations are in accordance with 40 CFR 411.32 and 40 CFR 411.37. Effluent Guidelines and Standards, Cement Manufacturing Point Source Category, Materials Storage Piles Runoff Subcategory. These limitations represent the degree of effluent reduction attainable by the application of best practicable control technology and best conventional pollutant control technology. Dischargers subject to these numeric effluent limitations must be in compliance with the limits upon commencement of and for the entire term of this permit. Discharges that are associated with industrial activities that do not contain runoff from material storage areas at cement manufacturing facilities are not subject to the effluent limitation described above.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that glass, clay, cement, concrete, and gypsum product manufacturing may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan, the proposed permit requires glass, clay, cement, concrete, and gypsum product manufacturing to collect and analyze samples of their storm water discharges for the pollutants listed in Table E–4. Note that only a portion of the facilities addressed under Part VIII.E. are subject to analytical monitoring requirements. The pollutants listed in Table E–4 were found to be present in the storm water discharges or are believed to be present based upon the description of industrial activities and significant materials exposed at the types of facilities specified for monitoring. The pollutants listed in Table E–4 were found to be above benchmark levels for significant portions of glass, clay, cement, concrete, and gypsum product manufacturing that submitted quantitative data in the group application process. Because these pollutants have been reported at benchmark levels from glass, clay, cement, concrete, and gypsum product manufacturing, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from glass, clay, cement, concrete, and gypsum product manufacturing must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table E–4. If the permittee collects more than four samples in this period,

then they must calculate an average concentration for all parameters analyzed, not simply a minimum of four selected analyses.

TABLE E–4.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Total Suspended Solids (TSS).	100 mg/L
Total Recoverable Aluminum.	0.75 mg/L
Total Recoverable Copper ..	0.009 mg/L
Total Recoverable Iron	0.3 mg/L
Total Recoverable Zinc	0.65 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table E–4, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table E–4, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE E–5.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table E–4, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table E–4, then no further sampling is required for that parameter.
4th Year of Permit Coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table E–4. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. of the permit (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA as described in Part VI.E.4. of this fact sheet.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the

effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required. Note that this requirement applies to all facilities and not just those subject to the analytical monitoring requirements under Part VI.E.7. of this fact sheet. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Compliance monitoring requirements. Today's proposed permit requires permittees with discharges of runoff from material storage at cement manufacturing facilities to monitor for the presence of TSS and pH. These monitoring requirements are necessary to evaluate compliance with the numeric effluent limitation proposed for these discharges. EPA requests comment upon the appropriateness of proposed monitoring frequency for these discharges. Monitoring shall be performed upon a minimum of one grab sample. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. The permittee shall include a description of the location of the outfalls, an explanation of why outfalls are expected to discharge substantially identical effluents, an and estimate of the size of the drainage area and runoff coefficient with the monitoring results. Monitoring results shall be submitted Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the month following collection of the sample. Facilities which discharge through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must also submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system.

h. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from glass, clay, cement, and gypsum manufacturing facilities. These notices specifically require that facilities with storm water discharges that are associated with glass, clay, cement, and gypsum manufacturing facilities are required to monitor their storm water discharges for oil and grease, COD, TSS, and pH. Today's proposed permit contains slightly different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for glass, clay cement, concrete, and gypsum manufacturing facilities in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.E. of today's proposed permit.

(1) Quarterly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (b), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the

purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to January.

(b) Examinations shall be made of grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

9. Cost Estimates

With the exception of the numeric effluent limitation in Part XI.E.4, today's proposed permit requirements for industries covered under Part XI.E. do not require expenditures beyond those estimated in the Part VII of this fact sheet.

E. Storm Water Discharges Associated With Industrial Activity From Primary Metals Facilities

On November 16, 1990 (55 FR 47990), the U.S. Environmental Protection Agency (EPA) promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from 11 categories of industrial facilities. This section of today's proposed permit includes storm water discharges associated with industrial activity from primary metals facilities. These facilities are commonly identified by Standard Industrial Classification (SIC) code 33. The SIC codes eligible for coverage under this section of today's proposed permit include the following:

- SIC 331—Steel works, blast furnaces, and rolling and finishing mills.
  - —3312—Steel works, blast furnaces, and rolling mills.
  - —3315—Steel wiredrawing and steel nails and spikes.
  - —3316—Cold-rolled steel sheet, strip, and bars.
  - —3317—Steel pipes and tubes.
- SIC 332—Iron and steel foundries.
  - —3321—Gray and ductile iron foundries.
  - —3322—Malleable iron foundries.
  - —3324—Steel investment foundries.
  - —3325—Steel foundries, not elsewhere classified.
- SIC 333—Primary smelting and refining of nonferrous metals.
  - —3331—Primary smelting and refining of copper.
  - —3334—Primary production of aluminum.
- SIC 334—Secondary smelting and refining of nonferrous metals.
  - —3341—Secondary smelting and refining of nonferrous metals.
- SIC 335—Rolling, drawing, and extruding of nonferrous metals.
  - —3351—Rolling, drawing, and extruding of copper.
  - —3354—Aluminum extruded products.
  - —3356—Rolling, drawing, and extruding of nonferrous metals, except copper and aluminum.
  - —3357—Drawing and insulating of nonferrous wire.
- SIC 336—Nonferrous foundries (castings).
  - —3363—Aluminum die-castings.
  - —3364—Nonferrous die-castings, except aluminum.
  - —3365—Aluminum foundries.
  - —3366—Copper foundries.
  - —3369—Nonferrous foundries, except copper and aluminum.
- SIC 339—Miscellaneous primary metal products, not elsewhere classified.
  - —3398—Metal heat treating.
  - —3399—Primary metal products, not elsewhere classified.

Group applications were received from facilities representing each of the categories of industry eligible for coverage under this section. A large number of group applications also included facilities identified by other SIC codes. These facilities may be covered in whole, or in part, by other sections of today's proposed permit. In other cases, SIC codes may have been assigned improperly. The special conditions reflected in this section of today's proposed permit are related to specific operations taking place at a facility. These operations should be used as the basis for determining permit requirements appropriate for that particular facility.

Although there are many activities common to some or all of the facilities covered by this section, some of the operations discussed are unique to a particular industry group. Due to the broad range of activities conducted by facilities in this category, it would be impossible to identify all activities occurring at facilities covered by this section. This fact sheet attempts to describe the major activities representative of many of the facilities addressed by this section and provides examples of concerns associated with storm water discharges from primary metals facilities. All materials present and industrial activities taking place at a facility that have a potential impact on storm water discharges must be addressed by the facility's pollution prevention plan, whether or not the material or activity is specifically addressed by this section.

This fact sheet discusses industrial activities and the pollutants of concern potentially associated with each. Due to the complex nature of this industry, many facilities will undoubtedly be involved in operations addressed by other sections of today's proposed permit. In some cases these activities will be referenced in this section, however all possibilities can not be anticipated and the permittee should examine all aspects of their operations to determine which sections of today's proposed permit are applicable to each.

When an industrial facility, described by the above eligibility provisions of

this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

Facilities in the primary metals industry conduct a wide range of activities. The SIC manual lists seven industry groups (three-digit SIC codes), and 27 industry numbers (four-digit SIC codes) within the sector. Of these, facilities representing 21 four-digit SIC codes submitted group applications.

Due to the large number of alternate processes available for many activities conducted within the primary metals industry it is very difficult to characterize "typical" facilities. Facilities within the same industry can employ quite dissimilar processes to arrive at a similar product. Differences can be found in the types of raw materials, furnaces or ovens, casting processes, the degree of mechanization, and any finishing operations which may be employed by a particular facility. Considerable differences can also be seen between facilities based on their customers needs. Some facilities may operate as a job shop, providing finished parts to other companies. Other facilities could conduct more limited operations and pass the product on to other facilities that provide finishing operations exclusively.

These differences in specific processes, as well as in the general scale and scope of individual operations can make facilities with the same or similar SIC codes quite different. Due to the difficulty in subdividing the industry into distinct facility types, the following discussion briefly describes the full range of activities potentially employed by members of this industry. Despite the substantial diversity within the industry group, there are a number of general operations which characterize the majority of industrial processes.

Facilities in the primary metals industry are typically involved in one or more of the following general operations: raw material storage and handling; furnace and oven related processes; preparation of molds, casts, or dies; metal cleaning, treating and finishing; and waste handling and disposal.

a. Raw material storage and handling activities. Due to the nature of the primary metals industry, large quantities of raw materials are required for many operations. The extent to which these materials are stored outside exposed to precipitation will depend on the specific operations taking place at a facility, the size of the operation, as well as the storage space available that is covered. Some of the most common materials used are metals, fuels, fluxes, refractories, sand, and an assortment of solvents, acids, and other chemicals.

The primary raw material for all facilities in the industry is the source of metal to be used or processed. For steel works, smelters, and blast furnaces, the raw material could be metallic ores, scrap, dross, or foundry returns. Foundries may use scrap materials, borings, turnings, metal ingots, pigs or a mixture of these and other materials. Rolling mills, heat treaters, and metal finishing operations will generally use billets, slabs, blooms, bars, pigs or other cast metal pieces as their primary raw material. These may be produced at another part of the same facility, or purchased from another source. Some of these materials may arrive with protective or incidental coatings of oil, oxides, or other impurities. Due to the large size and volume of some of these materials they may be stored outside.

Energy sources for facilities within the industry are also quite varied. While steel mills with coking operations may use coal as the fuel for firing coke ovens, coal would also be the raw material that would be converted to coke. Some iron and steel foundries or mini-mills may use coke as a fuel only, or may use electric arc furnaces for melting. Smaller foundries (ferrous or nonferrous) may use gas-fired or electric induction furnaces.

A variety of fluxes are often added to the molten metal to allow impurities to be removed as slag or dross. In the iron and steel industry, limestone is probably the most common flux used. Others include dolomite, soda ash, fluorspar, and calcium carbide. Nonferrous operations may use other fluxing agents or none at all.

During the melting process, refractories are used to line and protect the furnaces. These refractories have limited lives and must be replaced periodically. The life of the refractory will depend on the type of furnace as well as the material being melted. Some large furnaces require almost constant patching of the refractory materials and thus large quantities may be stored for future use.

Another common material used in casting operations is sand. Many foundries will use sands of different types to produce the molds and cores for the production of castings. Although some facilities are able to recycle their sand, others must dispose of some or all of the used sand and thus require large amounts of fresh sand as a raw material. There are also a large number of sand additives and binders which may be used to control the properties of the mold produced. "Wet" sand may contain clay, seacoal, bentonite, wood flour, phenol, iron oxide, and numerous other acids and chemicals, some of which may be toxic.

Other processes related to finishing operations can require a wide variety of solvents, chemicals, and acids. Many facilities involved in cleaning, treating, painting, or other finishing operations may store these products in tanks or drums which may be exposed to precipitation.

b. Furnace, rolling, and finishing operations. The majority of processes within the primary metals industry are conducted inside. These activities include all types of furnace operations, rolling operations, as well as all kinds of metal finishing activities. Many of these operations, however, generate significant quantities of particulate matter which, if not properly controlled, can result in exposure to precipitation.

There are many different types of furnaces. Each has advantages and limitations and are used for different types of metals. Facilities may use coal, coke, or gas fired furnaces as well as electric arc or induction furnaces.

Coke ovens, or batteries, generally use coal fired furnaces to heat coal in the absence of oxygen to drive off volatiles. The resultant product is coke which is subsequently used in other furnace operations. Blast furnaces are usually operated on a continuous basis with coke, iron ore, and fluxes charged at the top of a vertical shaft while molten pig iron and slag are tapped at different levels below.

Sintering plants burn coke breeze (particles too small to use for charging

in cupola or blast furnaces) mixed with iron ore, flue dust, or other products to fuse them into materials that can then be charged with regular coke in a furnace. Cupola furnaces are used by ferrous foundries and operate in essentially the same manner as blast furnaces, allowing a range of scrap steel and iron to be charged with coke and fluxes at the top of the furnace.

Basic oxygen process furnaces use a mixture of molten iron and scrap as the charge. High-purity oxygen is injected into the furnace where it combines with impurities in the charge materials and provides heat to melt the charge of scrap.

There are two types of electric furnaces in use. Electric arc furnaces operate in a batch fashion and are often used by steel mini-mills. Scrap metal is placed in the furnace along with three electrodes which provide the energy to melt the charge. Electric induction furnaces are generally smaller than other types described above and require that cleaner metals be used.

Gas-fired furnaces are often used by nonferrous foundries. They are generally small and require relatively clean metals for melting.

One trait that all types of furnaces share is the generation of significant emissions, including particulate emissions. Blast furnaces, sintering plants, and cupola furnaces, all fired by coke, have particularly high particulate emissions. These furnaces are capable of handling a relatively "dirty" charge, with significant impurities which can lead to a variety of emissions problems. For these reasons, these types of furnaces will have emissions controls such as baghouses, wet scrubbers, or electrostatic precipitators. Electric arc furnaces are also able to melt fairly "dirty" scrap and can also have significant levels of particulate emissions.

At the other end of the spectrum are smaller electric induction and gas fired furnaces which generally require a very clean charge. Although this reduces the volume of emissions concerns significantly, they are also less likely to have as extensive pollution control and thus fugitive emissions of particulates may be significant.

The effectiveness of emissions control equipment in controlling particulate generation will depend on the furnace operation, the raw materials used, the type of control equipment in place, and the degree to which it is operating properly. Fugitive emissions, faulty or improperly maintained equipment, and "dirty" raw materials can all contribute to particulate emissions that may not be captured by pollution control equipment, and may be exposed to precipitation.

Another category of operations are rolling, drawing, and extruding operations. Facilities involved in these operations will often use furnaces similar to those described above. The metal will often be heated, and then passed through a series of rollers which alter its dimensions, making it longer, flatter, etc. This process generally involves large amounts of contact cooling water which can contain high levels of suspended solids and oil and grease.

c. Preparation of molds, pouring, cooling, and shakeout. Foundry operations and die-casters will generally prepare the molds, casts, or dies that will determine the ultimate shape of the product to be produced. There are a number of possible operations with significant differences between them. These include sand casting, investment casting, and die casting.

Sand casting operations involve a number of possible steps and a range of materials. Casts are shaped in two sections which form the outside of the part to be produced. Cores can also be used to form inner surfaces of the parts. A variety of sands may be used and can be combined with clay and a number of other additives to give the mold the desired properties. Once the casting has cooled, it is placed on a vibrating screen which shakes loose the majority of the sand. The casting is then ready for cleaning and finishing operations. At some facilities the used sand may be recycled or some or all of the sand may need to be disposed of and replaced.

Investment casting involves the formation of a wax replica of the part to be produced, usually in a metal die. A series of wax parts may be attached to a "tree." Once a tree is completed, it is coated with a ceramic cast in a series of dipping operations. The wax may then be removed from the cast in a furnace or the metal can be poured in directly. As in sand casting, the casting is allowed to cool before the cast is removed. A separate wax form and ceramic shell must be made for each part to be produced.

Die-castings employ a more direct route from molten metal to finished part. A metal die is produced and molten metal is injected under pressure into it. Once it has cooled, the casting is removed and is ready for finishing operations. Unlike sand casting or investment casting, the die can be used over and over to produce more parts.

Like most foundry operations, molds are generally prepared indoors. There are, however, particulate emissions associated with the pouring and cooling of molten metal.

d. Metal cleaning, treating, and finishing. Almost all operations in the primary metals industry result in metal products which require some degree of finishing. The type of finishing activities undertaken depend on the material being treated, as well as the properties desired in the final part and can include both mechanical and chemical operations.

Castings generally come out of their molds with metal sprues and other imperfections which must be removed. This can be done through grinding, cutting, or blasting with sand, shot, or grit. Other possible operations include drilling, threading, or dimensioning. A combination of these operations is often necessary.

Some facilities such as rolling mills will use a descaling process to remove oxides and other residues which can form on the surfaces of metallic products. Typical operations include blasting with water or sand. This produces large quantities of scale and other particulate matter which may contain other residual products such as oil.

Heat treating is another operation which can involve furnaces for controlled heating and cooling of large quantities of metal. A variety of media may be used to cool metals at different rates. Oil, water, and liquid salt baths may all be used depending on the properties desired in the finished product. Acid pickling may be used to remove unwanted material from the surface of metal. Other cleaning and finishing operations may involve a wide range of solvents, acids, or other chemicals. All of these processes can generate toxic wastes in the form of sludges, particulates, or spent baths. In addition, residuals from these operations left on the metal surface may become exposed to storm water if materials are transported or stored outside.

e. Waste handling and disposal. Wastes are generated from numerous sources within the primary metals industry. Some types of waste are found at a majority of facilities while others may be specific to a particular activity. Some of the common waste products include used sand, cores, butts, refractory rubble, machining and finishing wastes, slag, dross, and collected particulates such as baghouse dust.

Sand casting operations which are not able to fully recycle their sand may generate large volumes of waste or "burnt" sand. "Wet" sands may contain any one of a number of additives,

depending on the specific type of casting being produced. Other related wastes include the cores and butts used in the sand casing process.

Most casting operations will produce a product which requires some degree of machining and finishing. The wastes produced will depend mainly on the material being finished and whether a mechanical or chemical process is used. Machining waste can include fines, turnings, or cuttings as well as shot, grit, and scale from blasting operations. Chemical finishing can result in waste solvents, acids, and pickling sludges and baths which contain metal wastes.

The metal melting process results in the production of slag from ferrous, or dross from nonferrous materials. The content and volume of these wastes produced will vary depending on the charge material, and any fluxing agents or additives that may be used. In general, slag is produced in greater quantities and will be more likely to be stored outside, however there is the possibility of exposure of both types of waste to precipitation.

Particulate matter generated in furnaces and during machining is another source of waste with significant potential for storm water contamination. These waste streams may be segregated at larger facilities or combined, but the concerns are essentially the same. The dusts are collected in baghouses, electrostatic precipitators, wet scrubbers, or in cyclones and disposed of. If the pollution control equipment is inadequate, or not operating effectively, there is potential for storm water contamination from these types of waste.

2. Pollutants Found in Storm Water Discharges –1

Impacts caused by storm water discharges from primary metals facilities will vary. A number of factors will influence to what extent the activities at a particular facility will affect water quality. These include: geographic location, hydrogeology, the amounts and types of materials stored outside, the types of processes taking place outside, the size of the operation, as well as the characteristics of a particular storm event. These and other factors will interact to affect the quantity and quality of storm water runoff. For example, particulate emissions from furnaces or ovens may be a significant source of pollutants at some facilities, while outdoor material storage such as scrap piles may be a primary source at others. In addition, sources of pollution other than storm water, such as illicit connections,[62] spills, and other improperly dumped materials, may contribute significant levels of pollutants into waters of the United States.

A summary of industrial activities conducted by primary metals facilities in the group application process is listed in Table F–1. The table also lists the sources of pollutants related to the activity and what the specific pollutants of concern are. The table is limited to those activities which are generally conducted outside, or that have potential to contribute pollutants to storm water discharges. Many processes in the primary metals industry are conducted inside and are therefore not represented in Table F–1.

TABLE F–1.—POLLUTANTS OF CONCERN FOR MAJOR ACTIVITIES WITHIN THE PRIMARY METALS INDUSTRY

Activity	Source	Pollutants of concern
Raw material storage and handling	Metal product stored outside such as foundry returns, scrap metal, turnings, fines, ingots, bars, pigs, wire.	Residual or protective Oil & Grease, Metals, TSS, COD, TSS.
	Outdoor storage or handling of fluxes	pH (limestone).
	Storage piles, bins, or material handling of coke or coal	TSS, pH, metals.
	Storage or handling of casting sand or refractory	TSS.
Vehicle Maintenance	Vehicle fueling and maintenance or outdoor storage tanks and drums of gas, diesel, kerosene, lubricants, solvents.	Oil and grease.
Waste materials—handling, storage, and disposal.	Slag or dross stored or disposed of outside in piles or drums.	Metals, pH.
	Fly ash, particulate emissions, dust collector sludges and solids, baghouse waste.	TSS.
	Storage and disposal of waste sand or refractory rubble in piles outside.	TSS, metals, misc. "wet" sand additives.
	Machining waste—fines, turnings, oil, borings, gates, sprues, scale.	TSS, metals, oil & grease.
	Obsolete equipment stored outside	Oil & grease.
	Landfilling or open pit disposal of wastes onsite	See Part VIII.L.
Furnace operations and pollution control equipment.	Losses during charging of coke ovens or sintering plants and from particulate emissions.	TSS, particulates, metals, volatiles, pH.
	Particulate emissions from blast furnaces, electric arc furnaces, induction furnaces.	TSS, metals.
	Fugitive emissions from poorly maintained or malfunctioning baghouses, scrubbers, electrostatic precipitators, cyclones.	TSS, metals.
	Wastewater treatment operations exposed to precipitation.	See Part VIII.T.
Rolling, casting, and finishing operations ..	Exposure of wastewater used for cooling or descaling related to rolling.	Oil and grease, pH, TSS, metals, COD.
	Storage of products outside after painting, pickling, or cleaning operations.	pH, solvents, metals.

[62] Illicit connections are contributions of unpermitted non-storm water discharges into storm sewers from any number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings.

TABLE F–1.—POLLUTANTS OF CONCERN FOR MAJOR ACTIVITIES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Activity	Source	Pollutants of concern
	Casting cooling or shakeout exposed to precipitation or wind.	TSS, metals.
	Losses of particulate matter from machining operations (grinding, drilling, boring, cutting) through deposition or storage of products outside.	Metals, TSS.
Plant yards	Areas of the facility with unstabilized soils subject to erosion.	TSS.
Illicit discharges	Improper connection of floor, sink, or process wastewater drains.	Dependent on source.

Although operations at primary metals facilities may vary considerably, the elements with potential impact on storm water discharges are fairly uniform and consistent. Facilities may include considerable areas of raw and waste material storage such as coal, coke, metal, ores, sand, scale, scrap, and slag. Processes generally involve furnaces for heating and melting metals or for producing coke, any of which may result in significant particulate emissions. Due to the nature of their operations some facilities will have large areas of exposed soil and heavy vehicle traffic which can lead to erosion.

a. Raw material storage and handling activities. Raw materials with potential effects on storm water discharges fall into a number of distinct categories.

Sands used for the production of molds or cores can contribute to TSS loadings. Piles of materials may be washed away directly, or spills and windblown losses may occur during handling and process related activities.

Metal raw materials can come in numerous forms including billet, slab, pig, bar. These materials have the potential to corrode which can result in the loss of metal to a solution, i.e., water. The following metals are referred to as the galvanic (or electromotive) series and have a tendency to corrode and become soluble in water: magnesium, aluminum, cadmium, zinc, steel or iron, cast iron, chromium, tin, lead, nickel, soft and silver solder, copper, stainless steel, silver, gold, platinum, brass and bronze. For some metals, the extent and rate of corrosion is dependent on whether it occurs in an oxygen-starved or oxygen-abundant atmosphere. If materials are coated in oil to prevent corrosion, or residual chemicals used to clean or treat the metal are present, these can also be a source of pollution easily picked up by storm water runoff.

Scrap metals come in a variety of forms including machining waste such as turnings, shavings, filings, borings or as post consumer waste in a variety of forms. These materials can contribute metals, oil and grease, suspended solids, and other pollutants to storm water runoff depending on their makeup and origin.

Runoff related to storage and handling of coal and coke can contribute suspended solids, metals, as well as oil and grease to runoff. These can be released from piles, hoppers, or bins through handling or wind-blown losses. Significant losses can also occur during handling with conveyors, trucks, or while preparing charges for the furnace or sintering operations.

Fluxes such as limestone may be stored in piles, bins, or hoppers outside or become exposed to precipitation during unloading and handling activities. Limestone can increase the pH of storm water. Fluxes can also contribute to loadings of suspended solids (TSS) or have other effects depending on their makeup.

A variety of acids and solvents may be stored in drums or tanks for use in metal treating and cleaning operations. Leaks and spills from tanks and drums or during handling can result in discharges with storm water. These materials can affect pH of storm water and may be toxic.

b. Process activities. Many processes can contribute pollutants to storm water discharges. These can include all types of furnaces, metal finishing activities, as well as material handling equipment.

Furnaces of all types can generate particulate emissions. The quantity and character of these emissions can vary greatly depending on the type of furnace, the material being melted, the fuel used, and any pollution control equipment that may be in place. In general, large coke-fired and electric arc furnaces capable of handling fairly dirty charge products will have higher emissions, but are also more likely to have sophisticated pollution control such as wet scrubbers, baghouses, and electrostatic precipitators. Smaller gas fired or electric induction furnaces generally require a fairly clean charge and have less emissions, but might also have less sophisticated controls. Settling of these emissions on roofs and plant yards are very likely to be washed away in storm water runoff. These particulates can contain a wide range of constituents which can contribute metals and suspended solids to discharges.

Material handling equipment such as conveyors, trucks, and forklifts can all contribute drippings of oil and grease as well as hydraulic fluids. This equipment may also generate or release particulate matter related to the materials being handled. Pallets, hoppers, drums, and storage bins may all contain residual materials which may become exposed to storm water.

Metal finishing operations can be divided in two general types. Mechanical operations such as grinding, blasting, boring, chipping, cutting, and descaling can all produce metal fines, chips, and turnings which may contribute metals and suspended solids to discharges. Residuals of oil or other materials on the finished goods or waste products can also contribute pollutants. Other finishing operations include acid pickling, solvent cleaning, and all types of heat treating activities. Materials that have been treated or finished may have residual chemicals on them such as pickling baths, oil or liquid salt quench media, or solvents. Exposure of these materials could contribute to pH, metals, or oil and grease in storm water discharges.

Stationary process equipment may also produce a substantial amount of residual particulate material that tends to accumulate on and around the equipment. Many materials used for primary metals production are conducive to this type of buildup. This will typically occur around rotating machinery, moving parts, bearings, conveyors and at the output of the equipment, e.g., storage containers. Particulate material that accumulates can become a source of contamination if it comes in contact with either precipitation or storm water runoff.

c. Waste material storage, handling, and disposal. Waste materials are generated in large volume from many of the facilities in this industry. These wastes can include used sand, cores and butts, refractories, slag and dross, baghouse or cyclone dusts, scrubber dusts and sludges, machining wastes, and obsolete equipment. There is potential for pollution from many of these sources if not properly stored, handled, and disposed of.

Used sands, cores, butts, and refractory rubble are all potential sources of TSS. Due to the large volumes potentially generated and their generally benign nature, these materials are often stored outside. The exposure of these materials to molten metal also presents the possibility of contamination with metals which may also get washed away with storm water.

Wastes related to pollution control equipment are particularly susceptible to being discharged with storm water if not properly controlled. These wastes could originate from baghouses, cyclones, electrostatic precipitators or scrubbers. These may be in place to control emissions from a large variety of ovens and furnaces, as well as mechanical or chemical metal finishing operations. These dusts and sludges typically contain an assortment of metals, metal oxides, and other particulate matter. The size of particulates that are able to be captured will vary from one type of equipment to the next and will depend on proper operation and maintenance.

Machining and finishing waste which is not collected as described above may also be generated in significant quantities. This material is typically metallic fines and particulate matter but may contain cutting oil or other materials as well. If stored outside in piles, drums, hoppers, or other containers these materials can contribute metals, TSS, or oil to precipitation and storm water runoff.

d. Erosion and sediment loss. Erosion from plant yards is another potential source of storm water contamination from primary metals facilities. Areas of vehicle traffic related to material handling, loading, unloading, material storage areas etc. may all have exposed soils with the potential for erosion. These soils can contribute to TSS loadings in storm water discharges. Exposed surfaces also limit the potential for housekeeping measures such as sweeping, making spills of other materials (particulate or liquid) harder to clean up and more likely to be washed away with storm water. For example: one group application consists of 5 facilities with a total land area of 623 acres. Of this, approximately 105 acres (16.9 percent) were impervious surfaces (buildings, paved areas), leaving 83 percent of the total area potentially susceptible to erosion. Vehicle traffic, material handling, and storage activities taking place in unstabilized areas can all lead to erosion.

e. Tables F–2 and F–3 show results of the monitoring data. Table F–2 contains the data for conventional pollutants; Biochemical Oxygen Demand (BOD_5), Chemical Oxygen Demand (COD), Nitrate/Nitrite Nitrogen, Total Kjeldahl Nitrogen (TKN), Oil and Grease, pH, Total Phosphorus, and Total Suspended Solids (TSS). Table F–3 contains data submitted under Parts B and C for pollutants which were believed to be potentially present in discharges. The data presented reflects pollutants for which a significant number of samples were taken, and concentrations above detection levels were observed. These included aluminum, cadmium, chromium, copper, iron, lead, magnesium, manganese, nickel, zinc, ammonia, phenols, and sulfate.

TABLE F–2.—DATA SUMMARY FOR CONVENTIONAL POLLUTANTS (MG/L)[1]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	163	140	32.2	34.1	0.0	0.0	1200.0	2500.0	11.0	8.3	83.0	81.5	340.0	210.0
COD	162	151	221.3	109.8	0.0	0.0	3600.0	1000.0	70.5	60.0	670.0	420.0	2510.0	690.0
Nitrate+Nitrite Nitrogen	148	135	1.17	1.36	0.0	0.0	15.30	19.10	0.690	0.770	3.60	4.30	8.20	15.60
Total Kjeldahl Nitrogen	157	146	3.56	3.05	0.0	0.0	41.00	42.00	1.980	1.595	13.00	9.70	30.00	42.00
Oil & grease	163	N/A	5.86	N/A	0.0	N/A	220.0	N/A	1.0	N/A	47.0	N/A	182.0	N/A
pH(s.u.)	163	N/A	N/A	N/A	2.6	N/A	10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	163	148	1.25	0.52	0.00	0.00	78.00	35.00	0.170	.0140	1.80	0.96	17.00	4.00
Total suspended solids	162	149	388	182	0	0	6300	1220	72	69	1700	717	5700	1200

[1] Part 2 data submittals that did not report the units of measurement for the reported values of pollutants were not incided in these statistics.
[2] Composite samples.

TABLE F–3.—DATA SUMMARY FOR CONVENTIONAL POLLUTANTS (MG/L)[1]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Aluminum	65	64	4.80	2.60	0.0	0.0	60.40	21.40	1.40	0.83	22.50	9.90	60.40	21.40
Copper	140	122	0.53	2.28	0.0	0.0	210.0	140.0	.007	.008	3.60	3.10	150.0	67.0
Iron	27	25	45.97	32.30	0.06	0.0	1060.0	677.0	1.70	1.88	36.5	34.2	1060.0	677.0
Lead	134	121	.79	.19	0.0	0.0	67.0	5.0	.02	.02	1.41	1.0	11.0	2.60
Manganese	19	19	.68	.59	0.04	0	3.56	3.46	.26	.25	3.56	3.46	3.56	3.460
Zinc	143	131	9.90	6.60	0.0	0.0	430.0	330.0	0.45	0.43	11.80	9.67	360.0	280.0
Ammonia	16	16	.65	.55	0.0	0.0	3.0	2.0	.75	.36	3.0	2.0	3.0	2.0
Pyrene	7	7	0.06	0.01	0.0	0.0	0.29	0.07	0.01	0.0	0.29	0.07	0.29	0.07

[1] Part 2 data submittals that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

From the data presented in these two tables, a number of pollutants of concern have been identified. These included oil and grease, pH, TSS, and a number of metals.

• *Oil and Grease*—Sources of oil and grease from primary metals facilities include degreasing processes, cutting oils, as well as oils used in rolling and extruding operations. Oil and grease emulsions are detrimental to aquatic organisms and inhabitants because depositions of oil and grease can impact the aquatic food chain by inhibiting normal benthic growths; destroy algae

or other plankton; adhere to the gills of fish; and damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. Part 2 data indicate that oil and grease varied in grab samples from 0 to 220.0 milligram per liter (mg/L).

• *pH*—The hydrogen ion concentration in an aqueous solution is represented by pH. The pH scale ranges from 0 to 14 standard units. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions. The pH level is easily measured and is an indication of potential environmental impacts. Data submitted for part 2 of the application indicate that pH varied from 2.6 to 10.3 standard units. Some of the samples were outside the permitted range for wastewater discharges under the effluent limitation guidelines (pH 6–9), however, most samples submitted to EPA were within the 6.0 to 9.0 range.

• *Total Suspended Solids*—Suspended solids include both organic and inorganic materials. The inorganic compounds can include sand, silt, clay, and metals. The organic fraction includes such materials as grease, oil, animal and vegetable waste products, and adsorbed toxic organic pollutants. Solids may be inert, slowly biodegradable materials, or rapidly decomposable substances. Materials which may contribute to TSS at primary metals facilities include sand, machining waste and scrap, particulate emissions, coal, coke, fluxes, slag, dross, and erosion of soils from unstabilized areas. Part 2 application data for TSS show a wide range of 0 to 1,220 mg/L for the composite samples with a mean value of 162 mg/L and a range of 0 to 6,300 mg/L for grab samples with a mean of 368 mg/L. As a comparison, TSS values observed under NURP for average residential or commercial site concentrations were 239 mg/L.

• *Metals*—These results were highly variable but included some extremely high values. Due to the wide range of metals used by facilities in the primary metals industry, and the correspondingly large number of samplers who detected metals in their monitoring, metals are considered a pollutant of concern. Due to the wide variety of metals detected in many samples, another concern is the potential for additive, cumulative, and synergistic effects that these metals may have, and the potential for toxic effects on receiving waters.

The comparison of sampling results for metals to "Goldbook" values indicates that storm water discharges originating from these facilities were substantially higher than the acute freshwater criterion. Although in some cases average values are heavily influenced by extreme values, the frequency with which these metals were reported in storm water discharges leads to the conclusion that metals are of concern. Another principal concern is the synergistic and additive effects that these constituents may have on water quality. When taken in whole, storm water discharges from these facilities are often a complex matrix of a number of metals, suspended solids, and other compounds.

TABLE F–4. COMPARISON OF SAMPLING DATA FOR SELECTED PARAMETERS VERSUS NURP VALUES, EFFLUENT LIMITATIONS GUIDELINES, AND THE EPA "GOLDBOOK"

Pollutant	Mean		Maximum		Median		"Goldbook" [i]	Storm water effluent limitations guidelines	NURP
Sample Type	Grab	Comp	Grab	Comp	Grab	Comp	N/A	Daily max./ 30 day avg.	Avg. conc
pH (s.u.)	7.07	7.03	10.3	10.3	7.3	7.4	N/A	6–9	N/A
TSS	371	162	6300	1200	72	69	N/A	N/A	239
Oil & Grease	10.11	4.95	220	44	2.1	1	note [iii]	N/A	N/A
Aluminum	4.8	2.599	60	21.4	1.4	.83	N/A	2.0/1.0	N/A
Iron	44	31.44	1080	577	2.35	1.965	N/A	1.0/0.5	N/A
Lead	0.79	0.189	57	5	0.024	0.015	0.082 [ii]	N/A	0.238
Cadmium	0.074	0.015	3.7	0.38	0	0	0.0039 [ii]	N/A	N/A
Copper	3.5	2.28	210	140	0.097	0.068	0.0167 [ii]	N/A	0.053
Zinc	8.9	6.59	430	330	0.45	0.43	0.0507 [ii]	N/A	0.353
Chromium	5.053	2.2	396	124	.008	0	note [iv]	N/A	N/A
Nickel	0.7	0.75	35	42	0	0	1.4 [ii]	0.2/0.1	N/A

[i] Based on aquatic life criteria.
[ii] At freshwater acute concentration (aquatic life) at hardness of 100 mg/L. Toxicity decreases as hardness increases.
[iii] Oil & Grease (aquatic life) 0.01 of the lowest continuous flow 96-hour LC50.
[iv] Varies depending on chemical speciation.

3. Options for Controlling Pollutants.

There are five main areas of concern related to primary metals facilities. These are raw material storage and handling; waste material storage, handling, and disposal; furnace, oven, and related pollution control activities; rolling, extruding, casting, and finishing operations; plant yards; and illicit connections.

Table F–5 summarizes the primary sources of pollution in each of these categories and potential Best Management Practices (BMPs) associated with each.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY

Source	Potential best management practices
Metal product stored outside such as foundry returns, scrap metal, turnings, fines, ingots, bars, pigs, wire.	Store all wastes indoors or in sealed drums, covered dumpsters, etc. Minimize raw material storage through effective inventory control. Minimize runon from adjacent properties and stabilized areas to areas with exposed soil with diversion dikes, berms, curbing, concrete pads, etc.
Outdoor storage or handling of fluxes.	Store fluxes in covered hoppers, silos, or indoors and protect from wind-blown losses. Stabilize areas surrounding storage and material handling areas and establish schedule for sweeping.
Storage piles, bins, or material handling of coke or coal.	Where possible store coke and coal under cover or indoors and protect from wind-blown losses. Prevent or divert runon from adjacent areas with swales, dikes, or curbs. Minimize quantities of coke or coal stored onsite through implementation of effective inventory control.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
	Trap particulates originating in coke or coal storage or handling areas with filter fabric fences, gravel outlet protection, sediment traps, vegetated swales, buffer strips of vegetation, catch-basin filters, retention/detention basins or equivalent.
Storage or handling of casting sand.	Store raw sand in silos, covered hoppers, or indoors whenever possible. Prevent or divert runon from adjacent areas with swales, dikes, or curbs. Minimize quantities of sand stored onsite through implementation of effective inventory control. Tarp or otherwise cover piles. Trap particulates originating in coke or coal storage or handling areas with filter fabric fences, gravel outlet protection, sediment traps, vegetated swales, buffer strips of vegetation, catch-basin filters, retention/detention basins or equivalent.
Vehicle fueling and maintenance.	See Part VIII.P.
Outdoor storage tanks or drums of gas, diesel, kerosene, lubricants, solvents.	Store tanks and drums inside when possible. Establish regular inspection of all tanks and drums for leaks, spills, corrosion, damage, etc. Utilize effective inventory control to reduce the volume of chemicals stored onsite.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
	Prevent runon to and runoff from tank and drum storage areas, provide adequate containment to hold spills and leaks. Prepare and train employees in dealing with spills and leaks properly, use dry clean-up methods when possible.
Slag or dross stored or disposed of outside in piles or drums.	Collect waste waters used for granulation of slag—these are not allowed under this section. Store slag and dross indoors, under cover, or in sealed containers. Establish regular disposal of slag or dross to minimize quantities stored and handled onsite. Minimize runon to slag storage areas with diversion dikes, berms, curbing, vegetated swales. Trap particulates originating in slag storage areas with filter fabric fences, gravel outlet protection, sediment traps, vegetated swales, buffer strips of vegetation, catch-basin filters, retention/detention basins or equivalent.
Fly ash, particulate emissions, dust collector sludges and solids, baghouse dust.	Store all dusts and sludges indoors to prevent contact with storm water or losses due to wind. Establish regular disposal schedule to minimize quantities of pollutants stored and handled onsite.
Storage and disposal of waste sand or refractory rubble in piles outside.	Move piles under cover or tarps whenever possible. Establish regular disposal schedule to minimize quantities stored onsite. Stabilize areas of waste product storage and perform regular sweeping of area.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
Scrap processing activities (shredding etc.).	See Part VIII.N.
Machining waste stored outside or exposed to storm water—fines, turnings, oil, borings, gates, sprues, scale.	Store all wastes indoors or in sealed drums, covered dumpsters, etc. Stabilize areas of waste product storage and perform regular sweeping and cleaning of any residues. Consider using booms, oil/water separators, sand filters, etc. for outfalls draining areas where oil is potentially present. Minimize runon from adjacent properties and stabilized areas to areas with exposed soil with diversion dikes, berms, curbing, concrete pads, etc.
Obsolete equipment stored outside.	Where possible, dispose of unused equipment properly, or move indoors. Cover obsolete equipment with a tarp or roof. Consider using booms, oil/water separators, sand filters, etc. for outfalls draining areas where oil is potentially present. Minimize runoff coming into contact with old equipment through berms, curbs, or placement on a concrete pad.
Material losses from handling equipment such as conveyors, trucks, pallets, hoppers, etc.	Schedule frequent inspections of equipment for spills or leakage of fluids, oil, or fuel. Inspect for collection of particulate matter on and around equipment and clean. Where possible cover these areas to prevent losses to wind and precipitation.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
	Store pallets, hoppers, etc. which have residual materials on them under cover, with tarps, or inside.
Losses during charging of coke ovens or sintering plants.	Cover any exposed areas related to furnace charging/material handling activities. Stabilize areas around all material handling areas and establish regular sweeping. Route runoff from particulate generating operations to sediment traps, vegetated swales, buffer strips of vegetation, catchbasin filters, retention/detention basins or equivalent.
Particulate emissions from blast furnaces, electric arc furnaces, induction furnaces and fugitive emissions from poorly maintained or malfunctioning baghouses, scrubbers, electrostatic precipitators, cyclones.	Establish schedule for inspection and maintenance of all pollution control equipment—check for any particulate deposition from leaks, spills, or improper operation of equipment and remedy. Route runoff from particulate generating operations to sediment traps, vegetated swales, buffer strips of vegetation, catchbasin filters, retention/detention basins or equivalent.
Storage of products outside after painting, pickling, or cleaning operations.	Store all materials inside or under cover whenever possible. Prevent runon to product storage areas through curbs, berms, dikes, etc. Consider using booms, oil/water separators, sand filters, etc. for outfalls draining areas where oil is potentially present.

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
	Remove residual chemicals from intermediate or finished products before storage or transport outside.
Casting cooling or shakeout operations exposed to precipitation or wind.	Perform all pouring, cooling, and shakeout operations indoors in areas with roof vents to trap fugitive particulate emissions Recycle into process as much casting sand as possible.
Landfilling or open pit disposal of wastes onsite.	See Part VIII.L.
Losses of particulate matter from machining operations (grinding, drilling, boring, cutting) through deposition or storage of products outside.	Store all intermediate and finished products inside or under cover. Consider using booms, oil/water separators, sand filters, etc. for outfalls draining areas where oil is potentially present. Clean products of residual materials before storage outside.
Areas of the facility with unstabilized soils subject to erosion.	Stabilize storage areas and establish sweeping schedule. Minimize runon from adjacent properties and stabilized areas to areas with exposed soil with diversion dikes, berms, vegetated swales, etc. Stabilize all high traffic areas including all vehicle entrances, exits, loading, unloading, and vehicle storage areas. Conduct periodic sweeping of all traffic areas

TABLE F–5.—POTENTIAL BEST MANAGEMENT PRACTICES FOR SOURCES WITHIN THE PRIMARY METALS INDUSTRY—Continued

Source	Potential best management practices
	Trap sediment originating in unstabilized areas with filter fabric fences, gravel outlet protection, sediment traps, vegetated swales, buffer strips of vegetation, catch-basin filters, retention/detention basins or equivalent.
	Inspect and maintain all BMPs on a regular basis.
	Provide employee training on proper installation and maintenance of sediment and erosion controls.
Improper connection of floor, sink, or process wastewater drains.	Inspect and test all floor, sink, and process wastewater drains for proper connection to sanitary sewer and remove any improper connections to storm sewer or waters of the U.S.

4. Discharges Covered Under This Section

Storm water discharges covered by this section include all discharges where precipitation and storm water runoff come into contact with industrial activity including such things as: Raw materials, intermediate products, finished products, waste products, by-products, stored materials, plant buildings, material handling equipment, and fuels. This includes storm water discharges from haul roads, access roads, industrial plant yards, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility.

This section does not cover any discharge subject to process wastewater effluent limitation guidelines, including storm water that combines with process wastewater. Storm water that does not come into contact with any raw materials, intermediate products, finished products, waste products, by-products, stored materials, plant buildings, material handling equipment, or fuels.

5. Special Conditions

The following section identifies special conditions that are applicable to permittees applying for coverage under Part XI.F. of today's proposed permit.

a. Prohibition of non-storm water discharges. This section requires primary metals facilities to certify that certain non-storm water discharges are not occurring at their facilities. A list of non-storm water discharges that are not authorized by this section has been identified. These discharges are prohibited due to the likelihood these discharges will contain substantial pollutant concentrations. The following non-storm water discharges are not authorized by this section:

- Waste discharges to floor drains or sinks connected to the facilities storm sewer or storm drainage system.
- Water originating from vehicle and equipment washing.
- Steam cleaning wastewater.
- Process wastewater.
- Wash-water originating from cleaning plant floor areas; or material receiving areas.
- Wastewater from wet scrubbers.
- Boiler blowdown.
- Contact or noncontact cooling water.
- Discharges originating from dust control spray water.
- Discharges from oil/water separators and sumps.
- Discharges originating from the cleaning out of oil/water separators or sumps.
- Discharges from bermed areas with a visible oily sheen or other visible signs of contamination.
- Discharges resulting from casting cleaning or casting quench operations.
- Discharges from slag quench or slag rinsing operations.
- Discharges from wet sand reclamation operations.

The operators of non-storm water discharges must seek coverage under a separate NPDES permit if discharging to either a municipal separate storm sewer system or to waters of the United States. If such a permit has been issued, a copy of the NPDES permit must be attached to the applicant's storm water pollution prevention plan (the plan). If a permit application has been submitted for a non-storm water discharge, a copy of the application must be attached to the plan.

Facilities that have prohibited discharges identified under this section and which discharge to a sanitary sewer system, the facility operator are required to notify the operator of the sanitary sewer system in writing. The notification should be attached to the plan. Facilities that have been issued an industrial user permit under the pretreatment program for discharges prohibited under this section, a copy of the permit must be attached to the plan. In all instances, the permit applicant must document how non-storm water discharges are disposed and provide the pertinent documentation of that disposal practice within the plan.

6. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. All facilities covered by this section must identify a pollution prevention team, prepare a description of all potential pollutant sources at the facility, and identify measures and controls appropriate for the facility. These items must comply with the common requirements described in Part VI.C. of this fact sheet. In addition to these requirements, facilities covered by Part XI.F. of today's proposed permit must provide the following additional information in their pollution prevention plan.

(1) Description of potential pollutant sources. Facilities must identify on the site map the location of any and all pollution control equipment such as baghouses, wet scrubbers, electrostatic precipitators, etc. as well as any uncontrolled stack emissions which may be located onsite. The map should also identify the outfalls to which these areas drain. Due to the hazardous nature of pollutants generated in this industry, and the potential for deposition of particulate matter from emissions, these emissions can be a significant contributor to pollutants at a facility and should be identified.

(2) Measures and controls. There are typically five types of activity and materials present at facilities in the primary metals industry with potential impacts on storm water discharges. These have been discussed in today's fact sheet and include: raw materials storage and handling; process activities related to furnace operations, casting, rolling, and extruding; waste material storage, handling, and disposal; erosion from unstabilized plant areas; and illicit discharges, spills, and leaks. Each of these areas that is applicable to a facility must be identified in the pollution prevention plan and evaluated with regard to the BMPs discussed.

(a) Good housekeeping—This section requires that facilities implement measures to limit the amount of spilled, settled, and leaked materials which are washed away by storm water. These materials include coal dust or coke breeze, metal fines from finishing operations, particulate emissions from furnaces and ovens, as well as dust and

dirt from plant yards. In paved or other impervious areas sweeping is an easy and effective way to reduce these pollutants. Sweeping frequency should be determined based on the rates of accumulation of a particular material and its' potential impact on storm water discharges. Where significant particulates are generated in unstabilized areas of the plant, other measures may be necessary.

The large number of particulate generating processes and the makeup of these pollutants makes this an especially important aspect of pollution prevention at many facilities. Permittees must consider the storage of all such products under roof, in silos or covered hoppers, or under tarps to minimize exposure of particulates to precipitation and wind-blown losses.

Unstabilized areas at a site which may be related to material handling and storage or vehicle and equipment traffic should be considered for paving. These areas can build up significant levels of particulates from materials and material handling as well as soil and dust particles. Paving these areas allow good housekeeping measures to be practiced and make spills easier to clean up.

(b) Source controls—Permittees must consider preventative measures to minimize the exposure of significant materials to storm water. Due to the large volumes of materials used in the primary metals industry, they are a significant potential source of pollutants in storm water discharges. Storage of a wide range of materials outside is common among many facilities and measures should be taken to reduce the potential for contamination of storm water.

Measures include moving materials inside, under roof or cover, removing waste materials from the premises, and establishing scheduled removal of wastes to minimize storage onsite. Other measures to prevent runoff from contacting materials include swales, berms, dikes, or curbs to divert runoff away from significant materials or processes.

Source controls offer the most effective way to reduce pollutants in storm water discharges and are generally easier to implement than treatment measures.

(c) Preventive maintenance—Facilities must incorporate into their plan the inspection and maintenance of all equipment which could lead to releases of pollutants. This includes all particulate emissions control equipment, storage tanks and piping systems, and any other material handling equipment which could fail and release pollutants.

All particulate pollution control equipment must be maintained to operate properly and effectively to control settling of particulate matter. The inspection of emissions control is particularly important as failures may not be immediately obvious and could lead to significant releases of particulate matter. Leaks or blockage in ducts, overflows of dust collection systems, or mechanical breakdown of scrubbers could all lead to heavy particulate emission which can be easily washed away by storm water discharges. Other potential losses include leaking tanks or valves which could contain a variety of acids, solvents, or other chemicals.

(d) Spill prevention and response—There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

(e) Inspections—Primary metals facilities are required to conduct self inspections of all storage, process, and plant yard areas at least once per month. These inspections will allow the effectiveness of the pollution prevention plan to be monitored. The potential for problems which could affect storm water are extremely varied and can have significant impacts over a short time period. These inspections are necessary to ensure that problems are identified and remedied as quickly as possible. Points of particular importance include pollution control equipment, material handling areas, and waste collection and disposal areas. Tanks, drums, silos, bins, and hoppers are other areas of potential concern.

(f) Employee training—There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

(g) Record keeping and internal reporting procedures—There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

(h) Non-storm water discharges—There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

(i) Sediment and erosion control—There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

(j) Management of runoff—Facilities shall consider implementation of a range of management practices to control or treat storm water runoff. These include vegetative buffer strips or swales, filter fences and other types of filters, oil/water separators, and all types of settling basins and ponds. These practices allow the capture of pollutants from storm water before it leaves the site.

Due to the large size of many primary metals facilities, source controls may not be practical. In some cases, it may not be feasible to cover or otherwise protect large areas of material storage or exposed plant yards. Deposition of particulates from furnace or other process emissions may be relatively diffuse over a large area of the facility, and very difficult to control. In these cases management practices such as settling basins, retention or detention ponds, or recycle ponds can provide effective treatment of runoff. For smaller areas, filter fabric, booms, or other types of filters may be appropriate. In areas where oil and grease is a concern, oil/water separators may be appropriate and should be considered.

b. Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of the permit. Comprehensive site compliance evaluations should be conducted at least 4 times a year. The individual or individuals that will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that primary metals facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires primary metals facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table F–6. The pollutants listed in Table F–6 were found to be above benchmark levels for

a significant portion of the primary metals facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from primary metals facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from primary metals facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table F–6. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE F–6.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of Concern	Cut-off concentration
Nitrate+Nitrite Nitrogen	0.68 mg/L
Total Kjeldahl Nitrogen (TKN)	1.5 mg/L
Total Recoverable Aluminum	0.75 mg/L
Total Recoverable Copper	0.009 mg/L
Total Recoverable Manganese	0.05 mg/L
Total Recoverable Iron	0.3 mg/L
Ammonia	0.0925 mg/L
Total Recoverable Zinc	0.065 mg/L
Pyrene	0.0000028 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table F–6, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table F–6, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE F–7.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table F–6, then quarterly sampling is required during the fourth year of the permit.

TABLE F–7.—SCHEDULE OF MONITORING—Continued

4th Year of Permit Coverage.	• If average concentration is less than or equal to the value listed in Table F–6, then no further sampling is required for that parameter. • Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table F–6. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table F–6 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table F–6. Facilities that achieve average discharge concentrations which are less than or equal to the values in Table F–6 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. of the pursuit (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification

period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of a storm water discharge from each outfall are required at primary metals facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring or several parameters for discharges from primary metals facilities. These notices specifically require that facilities with storm water discharges from primary metals facilities are required to monitor their storm water discharges for oil and grease, chemical oxygen demand, total suspended solids, pH, acute whole effluent toxicity, total recoverable lead, total recoverable cadmium, total recoverable copper, total recoverable arsenic, total recoverable chromium, and any pollutant limited in an effluent guideline to which the facility is subject. Today's proposed permit contains fewer monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for primary metals facilities in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

In addition, EPA requests comments on the following monitoring and reporting requirements in lieu of those listed in part XI.F. of today's proposed permit.

a. Semiannual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in paragraphs XI.F.8.a.(1) through XI.F.8.a.(2) must monitor those storm water discharges identified below at least semiannually (2 times per year) except as provided in VI.C.3. (Sampling Waiver), VI.C.4. (Representative

Discharge), and XI.F.8.d. (Toxicity Testing). Permittees with facilities identified in parts XI.F.8.a.(1) through XI.F.8.a.(3) (below) must report in accordance with part VI.B. of the permit (Reporting: Where to Submit) and paragraph XI.F.8.c. (Reporting: When to Submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

(1) Facilities with storm water discharges associated with industrial activity classified as SIC 33 (Primary Metals Industry) are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L); TSS (mg/L); pH (s.u.); acute whole effluent toxicity; and any pollutant limited in an effluent guideline to which the facility is subject.

(2) A facility which observes no statistically significant mortality in a Whole Effluent Toxicity test for 100 percent effluent (runoff) in four consecutive samples (2 years) may cease monitoring for Whole Effluent Toxicity as well as any pollutants limited in an effluent guideline to which the facility is subject, for the remainder of the term of the permit.

(3) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for acute whole effluent toxicity, but must monitor for other parameters listed under paragraph XI.F.8.a.(1) above.

b. Sample type. All sampling to be performed will be taken by grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Reporting: when to submit. Permittees that are required to conduct sampling pursuant to Part XI.F.8.a. of this section shall monitor samples collected during the sampling period running from March to August and during the sampling period running from September to February. Such permittees shall submit monitoring results obtained during the reporting period running from April to March on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following April. A separate Discharge Monitoring Report Form is required for each event sampling period. The first report may include less than 12 months of information.

d. Toxicity testing

(1) Test Procedures

(a) The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater bodies. Due to the nonsaline nature of rainwater, freshwater should also be used for discharges to estuarine, marine, or other naturally saline waterbodies.

(b) All test organisms, procedures and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA/600/4–90/027, or the most current edition. The control water used will be moderately hard water as described in EPA/600/4–90/027, Table 6, or the most current edition.

(c) Tests shall be conducted annually (once per year) on a grab sample of the discharge. Test shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–27 (or the most current edition), Section 12, Report Preparation, and the report submitted to EPA with the Discharge Monitoring Reports (DMRs). On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(2) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected in the storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the sources of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

G. Storm Water Discharges Associated With Industrial Activity From Metal Mining (Ore Mining and Dressing)[63] *Facilities*

On November 16, 1990 (55 FR 47990), the U.S. Environmental Protection Agency (EPA) promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from eleven major categories of facilities, including: "(i) facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N * * * ." and "* * * (iii) facilities classified as Standard Industrial Classifications 10 through 14 (metal mining industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of noncoal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products or waste products located on the site of such operations."

This section of today's proposed general permit only applies to the portions of categories (i) and (iii) identified by 40 CFR part 440 and Standard Industrial Classification (SIC) code 10, metal mining. SIC code 10 includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores). This group also includes all ore dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. Common activities at these mills include: crushing, grinding, and separation by gravity concentration, magnetic separation, electrostatic separation, flotation, or leaching.[64] The

[63] For the purposes of this part of the fact sheet, the term "metal mining" includes all ore mining and/or dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately.

[64] For more information on metal mines/mills see EPA, Effluent Guidelines Division. November 1982.

following is a listing of the types of mining/milling facilities that are covered under SIC code 10:

- Iron Ores (SIC Code 1011);
- Copper Ores (SIC Code 1021);
- Lead and Zinc Ores (SIC Code 1031);
- Gold Ores (SIC Code 1041);
- Silver Ores (SIC Code 1044);
- Ferroalloy Ores, Except Vanadium (SIC Code 1061);
- Metal Mining Services (SIC Code 1081);
- Uranium-Radium-Vanadium Ores (SIC Code 1094); and
- Miscellaneous Metal Ores, Not Elsewhere Classified (SIC Code 1099).

This section does not cover any discharge subject to effluent limitation guidelines, including storm water that combines with process wastewater and mine drainage. Storm water that does not come into contact with any overburden, raw material, intermediate product, finished product, by-product, or waste product located on the site of the operation is not subject to permitting under this section according to section 402(l)(2) of the Clean Water Act. This section also does not apply to discharges from sites on Federal lands on which a claim has been established under the General Mining Laws but where no mining activities have been undertaken other than nominal claim-holding activities required by the Mining Law and applicable regulations.

This section is applicable to all phases of mining operations, whether active or inactive, as long as there is exposure to significant materials. This includes land disturbance activities such as the expansion of current extraction sites, active and inactive mining stages, and reclamation activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industrial Profile

There are typically three phases to a mining operation: the exploration and construction phase; the active phase; and the reclamation phase. The exploration and construction phase entails exploration and a certain amount of land disturbance to determine the financial viability of a site. Construction includes building of site access roads, and removal of overburden and waste rock to expose minable ore. These land-disturbing activities are significant potential sources of storm water contaminants. The active phase includes each step from extraction through production of a saleable product. The active phase may include periods of inactivity due to the seasonal nature of these metal mining activities. The final phase of reclamation is intended to return the land to its pre-mining state.

Because of the land-disturbing nature of the ore mining and dressing industry, contaminants of concern generated by industrial activities in this industry include total suspended solids (TSS), total dissolved solids (TDS), turbidity, pH, and heavy metals. Table G–1 lists potential pollutant source activities, and related pollutants associated with ore mining and dressing facilities.

TABLE G–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS

Activity	Pollutant source	Pollutant
Site Preparation	Road Construction	Dust, TSS, TDS, turbidity.
	Removal of Overburden	Dust, TSS, TDS, turbidity.
	Removal of waste rock to expose the metal	Dust, TSS, TDS, turbidity.
Mineral Extraction	Blasting activities	Dust, TSS, nitrate/nitrite.
Beneficiation Activities	Milling	Dust, TSS, TDS, pH, turbidity, fines, heavy metals.
	Flotation	Dust, TSS, TDS, pH, turbidity, fines, chemical reagents, acids, heavy metals.
	Gravity Concentration	TSS, TDS, pH, turbidity, heavy metals.
	Amalgamation	Dust, TSS, TDS, pH, turbidity, heavy metals, mercury.
	Waste Rock Storage	Dust, TSS, TDS, turbidity, pH, heavy metals.
	Raw Material Loading	Dust, TSS, TDS, turbidity, heavy metals.
	Processing materials unloading	Diesel fuel, oil, gasoline, chemical reagents.
	Raw or Waste Material Transportation	Dust, TSS, TDS, turbidity, heavy metals.
Other Activities	Sedimentation pond upsets	TSS, TDS, turbidity, pH, heavy metals.
	Sedimentation pond sludge removal and disposal.	Dust, TSS, TDS, turbidity, pH, heavy metals.
	Air emission control device cleaning	Dust, TSS, TDS, turbidity.
Equipment/Vehicle Maintenance	Fueling activities	Diesel fuel, gasoline, oil.
	Parts cleaning	Solvents, oil, heavy metals, acid/alkaline wastes.
	Waste disposal of oily rags, oil and gas filters, batteries, coolants, degreasers.	Oil, heavy metals, solvents, acids.

"Development Document for Effluent Limitations Guidelines and Standards for the Ore Mining and Dressing Point Source Category." EPA 440/1–82/061.

TABLE G–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS—Continued

Activity	Pollutant source	Pollutant
	Fluid replacement including hydraulic fluid, oil, transmission fluid, radiator fluids, and grease.	Oil, arsenic, lead, cadmium, chromium, benzene, TCA, TCE, PAHs, solvents.
Reclamation Activities	Site preparation for stabilization	Dust, TSS, TDS, turbidity, heavy metals.

Sources: Storm Water Group Applications, Parts 1 and 2 and EPA. "Development Document for Effluent Limitations Guidelines and Standards for the Ore Mining and Dressing Point Source Category." (EPA 440/1–82/061) November 1982.

Industrial activities, significant materials, and material management practices associated with ore mining and dressing methods are typically similar, varying only in the type of rock being mined. Examples of mineral commodities obtained from ore mining and dressing facilities include: Iron; copper; lead; zinc; gold; silver; ferroally ores such as molybdenum, manganese, chromium, cobalt, nickel, and tungsten; uranium; radium; vanadium; aluminum; antimony; bauxite; platinum; tin; and titanium. Industrial activities include, "* * * but [are] not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water" (40 CFR 122.26(b)(14)). The most common industrial activities at metallic mine sites include extraction of the metal, material crushing, and product separation. While all of these industrial activities can occur at metal mines, storm water discharges from some of the areas listed cannot be covered by this permit (see Part VIII.G.4. Discharges Covered Under This Section).

Significant materials include, "* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under Section 101(14) of CERCLA; any chemical facilities required to report pursuant to Section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge" (40 CFR 122.26(b)(12)). Significant materials commonly found at mining facilities include: Overburden; waste rock; subore piles; tailings; petroleum-based products; solvents and detergents; manufactured products; and other waste materials.

Materials management practices are defined as those practices employed to diminish contact by significant materials with precipitation and storm water runon, or practices utilized to reduce the offsite discharge of contaminants. To this end, sediment ponds, discharge diversion techniques, as well as methods of dispersion, are used to minimize impacts of significant materials on storm water. For mine sites requiring additional sources of water for processing operations, rainfall events as well as storm water runon will be managed for use in dust suppression, processing, and washing activities. Many mine sites are already equipped with sedimentation ponds and other established process wastewater treatment methods in order to meet effluent limitation guidelines. Additional storm water management practices used at mineral mining facilities include: discharge diversions; drainage/storm water conveyances; runoff dispersion; sediment control and collection practices; vegetation/soil stabilization; capping contaminated sources; and treatment.

Metals are recovered by three basic extraction techniques: surface mining; underground mining; and placer mining. Each type of extraction method may be followed by varying methods of beneficiation and processing. Presented below are brief descriptions of the industrial activities, significant materials, and materials management practices associated with these four extraction processes and associated beneficiation activities. Due to similarities in mining operations for many of the minerals within this sector, industrial activities, significant materials, and materials management practices are fairly uniform across this sector. Unique practices are noted.

a. Surface mining. Many mining facilities access metal deposits using surface extraction techniques such as strip mining, open-pit, open-cut, and open-cast. Surface mining is more economical than underground especially when the ore body is large and near the surface.

(1) Industrial activities. Extraction activities include removal of overburden and waste rock to access metal deposits. These land-disturbing activities generate piles of topsoil and other overburden as well as waste rock, which are typically stored beside, or within, the pit or quarry. In addition, land disturbance, drilling, blasting, stripping, and materials handling activities create large amounts of dust that are either dispersed by local wind patterns or collected in air pollution control mechanisms. At closure, overburden and waste rock may or may not be used to reclaim the pit or quarry depending on Federal, State, and local requirements. In addition, access roads and rail spurs, and associated loading and unloading areas, are found onsite.

Following extraction, the mined materials may be transferred to a nearby beneficiation/processing facility. At an ore beneficiation facility, the valuable metals are separated from the less valuable rock to yield a produce which is higher in metal content. To accomplish this, the ore must be crushed and ground small enough so that each particle contains mostly the mineral to be recovered or mostly the less valuable, or gangue, material. Valuable minerals are separated from the gangue by gravity concentration, magnetic separation, electrostatic separation, flotation, and leaching.

(2) Significant materials. Significant materials generated by most extraction activities at surface mines include overburden piles, waste rock piles, ore and subore piles, and materials spilled from loading and unloading activities. Other exposed materials that can be generated at these types of operations (as well as other metal mines), include: tailings from flotation and other separation stages; soils impacted by fugitive dust emissions; settling ponds that receive process wastewaters;

dredged sediment disposal areas; as well as raw material and product storage. Dust and particulate matter collected in air pollution control mechanisms may also be disposed of in onsite waste piles.

(3) Materials management practices. Materials management practices at surface mines are typically designed to control dust emissions and soil erosion from extraction activities, and offsite transport of significant materials. Settling ponds and impoundments are commonly used to reduce total suspended solids (TSS), total dissolved solids (TDS), and other contaminants in process generated wastewaters. These controls may also be used to manage storm water runoff and runon with potentially few alterations to onsite drainage systems. Few sampling facilities indicated the presence of traditional BMPs. Only 29 percent of the sampling facilities have ponds or impoundments as a storm water control.

Tailings impoundments are used to manage tailings generated at facilities engaged in flotation or heavy media separation operations. These impoundments are used to manage beneficiation/processing wastewaters generated at the facility and may also be used to manage storm water runoff.

b. Underground mining. Underground mining techniques are used to access metals located too far underground to access economically from the surface. Though typically a more expensive form of extraction, advantages to underground mining operations include year-round operation, less noise (applicable to facilities located near residential areas), and less surface land disturbance. The two main underground mining methods are stoping and caving. Both of these methods can be used in several variations depending on the characteristics of the ore body. Common stoping methods include cut-and-fill, square cut (timbered), shrinkage, and open. Caving methods include undercut, block, and sub-level. Underground mining is usually independent of surface mining, but sometimes proceeds or follows it. Tungsten, gold, lead, and zinc are some of the metals extracted using caving.

(1) Industrial activities/significant materials. Industrial activities that may be associated with storm water discharges include: loading/unloading activities; haul roads; products and materials storage; waste piles; and processing activities. Exposed materials associated with surface beneficiation and processing facilities at underground mines are similar to those associated with surface mining facilities.

(2) Materials management practices. Materials management practices for significant materials at the surface of underground mining facilities are similar to those materials management practices used at surface mining operations. However, waste rock or mill tailings are in some cases being returned to the mine as fill for the mined-out areas or may be directed to a disposal basin.

c. Placer mining. Placer mining is used to mine alluvial sands and gravels containing valuable metallic minerals. Placer deposits are usually mined exclusively for gold material but smaller amounts of platinum, tin, and tungsten may also be recovered. There are three main placer mining techniques including dredging, hydraulicking, and open cut.

(1) Industrial activities. The industrial activities at dredging placer mines excavate underwater gold deposits by bucketline, dragline, or by suction. The excavation devices dig, wash, and screen gold values which are then recovered using gravity concentration methods. Hydraulicking placer mines characteristically use high pressure water jets to excavate value-laden gravel banks. The most commonly used placer mining extraction method is the open cut. It involves stripping away topsoil and overburden to expose the auriferous gravels. The gold bearing gravels are excavated in sections and pushed to a placer wash plant for processing. Gravitational concentration is the common beneficiating technique at placer mines.

(2) Significant materials. Significant materials generated at placer operations include overburden, mine development rock, ore, sub-ore piles, mine waste dumps, tailings ponds and piles. Potential natural constituents include mercury, arsenic, bismuth, antimony, thallium, pyrite, and pyrrhotite. After settling, the liquid portion of the slurry is returned to the mill as process water and the remaining slurried waste is pumped to tailings. In placer operations, however, tailings are disposed of in streams or on land.

(3) Materials management practices. Settling ponds are used to manage process wastewaters and are in some cases being used to manage contaminated storm water runoff. Few materials management practices were indicated in the part 1 group applications.

d. Inactive mine sites. Inactive ore mining and dressing operations are those where industrial activities are no longer occurring. When active, mineral extraction could have occurred from surface mines, solution mines, placer operations, or underground mines. These sites are included in this section because significant materials may remain onsite. These materials, if exposed, are potential sources of storm water contamination. Until an inactive metals mine and/or beneficiation operation has been reclaimed under applicable State or Federal laws after December 17, 1990, the site is considered associated with an "industrial activity" and is subject to the conditions of this section. Due to the seasonal nature of this industry, mine sites can become temporarily inactive for extended periods of time. Temporarily inactive sites are not viewed the same as permanently inactive sites.

2. Pollutants Found in Storm Water Discharges From Metal Mining

The volume of storm water discharges and the type and concentrations of pollutants found in storm water discharges from active and inactive metal mining facilities will vary according to several factors. Such factors include: Geographic location; hydrogeology; the physical and chemical characteristics of the ores extracted; the physical and chemical characteristics of the waste rock and overburden removed; how the ore was extracted (e.g., open pit, underground, solution or dredging); the type of industrial activities occurring onsite (e.g., extraction, crushing, washing, milling, reclamation, etc.); the size of the operation; type, duration, and intensity of precipitation events; temperature ranges and variations; and the types of pollutant control measures used at the site. Each of these, and other, factors will interact to influence the quantity and quality of storm water runoff. For example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities, while roads constructed of waste rock may be a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections, spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Seven (7) separate part 1 metal mining group applications were received by EPA. These groups were required to collect and submit quantitative data from a representative sampling subgroup. EPA has yet to receive storm water quantitative data from all the designated sampling facilities.

After reviewing the quantitative data that was submitted, it is difficult to identify specific site characteristics which may be responsible for elevated

or insignificant pollutant loadings. In addition, the limited or lack of response from facilities in specific metal mining subsectors did not allow for a subsector analysis of the sampling data. Therefore, EPA analyzed the data in aggregate while trying to make some qualitative judgments based on the ores mined at each facility, and the status of mining operations reporting the data.

A review of the compiled data indicates large variations in minimum and maximum values for each of the eight conventional pollutants monitored and for the multitude of other pollutants reported, as required by part 2 of the application. Table G–2 presents a statistical summary of the quantitative data submitted, including the mean, maximum, minimum, median, 95th and 99th percentile values for both grab and flow-weighted composite samples.

TABLE G–2.—STATISTICS FOR POLLUTANTS IN STORM WATER[i]
[mg/L, except as noted]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD	18	12	10.0	10.6	0.0	1.0	27.0	44.0	9.0	6.0	27.0	44.0	27.0	44.0
COD	18	15	144.5	195.1	0.0	35.0	530.0	740.0	71.10	160.0	530.0	740.0	530.0	740.0
Nitrite+Nitrate as N	16	13	1.10	0.90	0.00	0.070	5.30	2.10	0.750	0.660	5.30	2.10	5.3	2.1
TKN	15	11	3.27	3.39	0.00	0.00	9.40	11.80	2.6	3.2	9.4	11.80	9.4	11.8
Oil & Grease	16	N/A	2.36	N/A	0.00	N/A	22.00	N/A	0.000	N/A	22.00	N/A	22.0	8.4
pH (s.u.)	24	N/A	N/A	N/A	4.5	N/A	8.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	21	15	1.83	1.06	0.00	0.000	14.00	7.00	0.300	0.380	11.0	7.0	14.0	7.0
Total Suspended Solids	17	15	6956	523	0.0	47	100000	3050	403	230	100000	3050	100000	3050
Arsenic	21	11	.55	.33	0.0	0.0	10.2	2.6	.004	.009	6.4	2.6	10.2	2.6
Cadmium	21	14	.015	0.25	0.0	0.0	0.19	0.20	0.0	0.0	.06	.2	.19	.2
Copper	18	13	3.88	.59	0.0	0.0	46.8	3.4	0.14	.09	46.8	3.4	46.8	3.4
Iron	6	4	176.44	48.81	0.0	3.55	581.0	144.0	47.3	23.85	581	144	581	144
Lead	22	13	.83	6.07	0.0	0.0	17.4	65.0	0.0	.05	1.2	65	17.4	65
Zinc	13	8	3.04	3.87	0.0	0.0	16.3	20.9	.59	.663	16.3	20.9	16.3	20.9
Sulfate	5	5	188.8	126.40	16	16	412	386.0	53	36	412	386	412	386

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in the statistics.
[ii] Composite samples.

TSS grab samples ranged from a minimum value of 0 mg/L to a maximum of 100,000 mg/L and a flow-weighted composite sample ranged from a minimum of 47 mg/L to a maximum of 3,050 mg/L. The median grab sample TSS concentration is 403 mg/L. The results indicate a lack of effective storm water sediment and erosion controls for these facilities and warrants further evaluation of TSS. The remaining conventional pollutants analyzed for in the storm water discharges displayed typically low concentrations.

Cyanide concentrations were reported for four gold mining and milling facilities. All quantitative data reported are less than 10 mg/L for those analyses.

One or more heavy metal concentrations were reported for each outfall. Unfortunately, the limited data prevents EPA from making definitive statements about the concentration of metals in storm water from metal mining operations. In general, elevated concentrations of metals coincided with elevated total suspended solids levels.

The quantitative data submitted for the metal mines in these group applications identifies the need to limit discharges of total suspended solids. EPA believes that if total suspended solids loadings are reduced there will also be a reduction in total metal loadings. For discharges that are low in pH, the heavy metals will tend to be in the dissolved phase, and may require additional treatment.

3. Options for Controlling Pollutants From Metal Mines

There are two options for reducing pollutants in storm water discharges; end-of-pipe treatment and implementing Best Management Practices to prevent and/or eliminate pollution. Discharges from mining operations are in some ways dissimilar to other types of industrial facilities. Mining facilities are often in remote locations and may operate only seasonally or intermittently, yet need year-round controls because significant materials remain exposed to precipitation when reclamation is not completed. These characteristics make resource intensive end-of-pipe management controls less desirable. A comprehensive storm water management program for a given plant may include controls from each of these categories. Development of comprehensive control strategies should be based on a consideration of site and facility plant characteristics.

a. End-of-pipe treatment. At many ore mining and dressing facilities, it may be appropriate to collect and treat the runoff from targeted areas of the facility. This approach was taken with 11 industrial subcategories within the ore mining and dressing industry, subject to national effluent limitation guidelines mill process wastewater and mine drainage. There are several areas where effluent limitation guidelines influence the permitting strategy for storm water discharges:

- Whenever storm water and mill process wastewater and mine drainage combine, the storm water discharge is also subject to effluent limitation guidelines;
- To meet the numeric effluent limitation guidelines, most, if not all, facilities must collect and temporarily store onsite runoff from targeted areas of the plant;
- The effluent limitation guidelines do not apply to discharges whenever rainfall events, either chronic or catastrophic, cause an overflow of storage devices designed, constructed, and maintained to contain a 10-year, 24-hour storm; and
- Most technology-based treatment standards, used for treating discharges subject to effluent limitation guidelines, are based on relatively simple technologies such as settling of solids, neutralization, and drum filtration.

End-of-pipe treatments are effective means to control mill process wastewater and mine drainage whenever the types of pollutants and the volume of water to be treated are known. However, storm water discharges from ore mining and dressing facilities can be numerous, intermittent, and of various volumes. Channelization of all storm water that comes into contact with significant materials into a single treatment facility, or construction of numerous treatment devices for each

discharge, may be burdensome for the regulated community. An appropriate means of storm water management at ore mining and dressing facilities are BMPs. BMPs allow the mine site operator to choose a particular BMP that is best for the characteristics of a particular site and to control parameters of concern. In cases of poor quality stormwater discharge (e.g., low pH, high metals, etc.), treatment may be necessary to protect receiving waters.

b. Best management practices. Effective storm water management controls for limiting the offsite discharge of storm water pollutants from ore mining and dressing facilities are source reduction BMPs. Source reduction BMPs are methods by which discharges of contaminants are controlled with little or no required maintenance. Examples of these types of controls include source reduction diversion dikes, vegetative covers, and berms. Source reduction practices are typically (but not always) low in cost and relatively easy to implement. In some instances, more resource intensive treatment BMPs, including sedimentation ponds, may be necessary depending upon the type of discharge, types and concentrations of contaminants, and volume of flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. The management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with mining activity.

The following four categories describe best management practice options for reducing pollutants in storm water discharges from ore mining and dressing facilities:

- Discharge diversions.
- Sediment and erosion control.
- Capping of contaminated sources.
- Treatment.

Because ore mining and dressing is largely a land disturbance activity, BMPs that minimize erosion and sedimentation will be most effective if installed at the inception of operations and maintained throughout active operations and reclamation of the site. From the construction of access and haul roads, to closure and reclamation activities, implementation of BMPs is often essential to minimizing long-term environmental impacts to an area.

Part 1 group application data indicates that few storm water BMPs have been implemented at sampling facilities. The group application process did not require a description of BMP locations, and did not require applicants to describe the number of identical BMPs implemented at each site. As a result, the effectiveness of BMPs, for storm water management, at these facilities cannot be evaluated.

Many BMPs were not listed by facilities because they have been implemented to treat waters subject to effluent limitation guidelines, and are not exclusively used for storm water management. For instance, 29 percent of the sampling subgroup reported using ponds for sediment control and collection. Since some facilities classified as SIC Code 10 are subject to effluent limitation guidelines, sedimentation ponds may be implemented at greater proportions than indicated in part 1 of the group applications.

Because BMPs described in the part 1 data are limited, EPA is providing an overview of supplementary BMPs for use at ore mining and dressing facilities. However, due to the site-specific nature of facilities within this sector, BMPs cited do not preclude the use of other viable BMP options. Table G–3 summarizes BMP options as they apply to land disturbance activities at ore mining and dressing facilities. Sources of BMP information include: "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990; "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September, 1992, (EPA 832–R–92–006); "Best Management Practices for Mining in Idaho," Idaho Department of Lands, November 1992; and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

TABLE G–3.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES

Land-disturbed area	Discharge diversions	Conveyance systems	Runoff dispersion	Sediment control & collection	Vegetation	Containment	Treatment
Haul Roads and Access Roads.	Dikes, Curbs, Berms.	Channels, Gutters, Culverts, Rolling Dips, Road Sloping, Roadway Water Deflectors.	Check Dams, Rock Outlet Protection, Level Spreaders, Stream Alteration, Drop Structures.	Gabions, Riprap, Native Rock Retaining Walls, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetated Buffer Strips.	Seeding, Willow Cutting Establishment.	.....	
Pits/Quarries or Underground Mines.	Dikes, Curbs, Berms.	Channels, Gutters.	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Sediment Settling Ponds, Straw Bale Barrier, Siltation Berms.	Seeding	Plugging and Grouting.	Chemical/Physical Treatment.

TABLE G–3.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES—Continued

Land-disturbed area	Discharge diversions	Conveyance systems	Runoff dispersion	Sediment control & collection	Vegetation	Containment	Treatment
Overburden, Waste Rock and Raw Material Piles.	Dikes, Curbs, Berms.	Channels, Gutters.	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Plastic Matting, Plastic Netting, Erosion Control Blankets, Mulch-straw, Compaction, Sediment/ Settling Ponds, Silt Fences, Siltation Berms.	Topsoiling, Seedbed Preparation, Seeding.	Capping	Chemical/Physical Treatment, Artificial Wetlands.
Reclamation	Dikes, Curbs, Berms.	Channels, Gutters.	Check Dams, Rock Outlet Protection, Level Spreaders, Serrated Slopes, Benched Slopes, Contouring, Drain Fields, Stream Alteration, Drop Structures.	Gabions, Riprap, and Native Rock Retaining Walls, Biotechnical Stabilization, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetative Buffer Strips, Silt Fences, Siltation Berms, Brush Sediment Barriers.	Topsoiling, Seedbed Preparation, Seeding, Willow Cutting Establishment.	Capping, Plugging and Grouting.	Chemical/Physical Treatment, Wetlands.

• *Haul Roads and Access Roads*—Placement of haul roads or access roads should occur as far as possible from natural drainage areas, lakes, ponds, wetlands or floodplains where soil will naturally be less stable for heavy vehicle traffic. If a haul road must be constructed near water, as little vegetation as possible should be removed from between the road and the waterway, as vegetation is a useful buffer against erosion and is an efficient sediment collection mechanism. The width and grade of haul or access roads should be minimal and should be designed to match natural contours of the area. Construction of haul roads should be supplemented by BMPs that divert runoff from road surfaces, minimize erosion, and direct flow to appropriate channels for discharge to treatment areas.

• *Pits or Quarries*—Excavation of a pit or quarry must be accompanied by BMPs to minimize impacts to area surface waters. As discussed in construction of haul roads, as little vegetation as possible should be removed from these areas during excavation activities to minimize exposed soils. In addition, stream channels and other sources of water that may discharge into a pit or quarry should be diverted around that area to prevent contamination.

BMPs can be used to control total suspended solids levels in runoff from unvegetated areas. These can include sediment/settling ponds, check dams, silt fences, and straw bale barriers.

• *Overburden, Waste Rock, and Raw Material Piles*—Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles should be located away from surface waters and other sources of water, and from geologically unstable areas. If this is not practicable, surface water should be diverted around the piles. As many piles as possible should be revegetated (even if only on a temporary basis). At closure, remaining units should be reclaimed.

• *Reclamation Activities*—When a mineral deposit is depleted and operations cease, a mine site must be reclaimed according to appropriate State or Federal standards. Closure activities typically include restabilization of any disturbed areas such as access or haul roads, pits or quarries, sedimentation ponds or work-out pits, and any remaining waste piles. Overburden and topsoil stockpiles may be used to fill in a pit or quarry (where practical). Recontouring and revegetation should be performed to stabilize soils and prevent erosion.

Major reclamation activities such as recontouring roads and filling in a pit or quarry can only be performed after operations have ceased. However, reclamation activities such as stabilization of banks, and reseeding and revegetation should be implemented in mined out portions, or inactive areas of a site as active mining moves to new areas.

EPA recognizes that quarries are frequently converted into reservoirs, or recreational areas, after the mineral deposit is depleted. However, this does not preclude the reclamation of disturbed areas above the quarry rim.

(1) Discharge diversions. Discharge diversions provide the first line of defense in preventing the contamination of discharges, and subsequent contamination of receiving waters of the United States. Discharge diversions are temporary or permanent structures installed to divert flow, store flow, or limit storm water runon and runoff.

These diversion practices have several objectives. First, diversion structures can be designed to prevent otherwise uncontaminated (or less contaminated) water from crossing disturbed areas or areas containing significant amounts of contaminated materials, where contact may occur between runon and

significant materials. These source reduction measures may be particularly effective for metal mining facilities to prevent runon of uncontaminated discharges from contacting exposed materials and/or reduce the flow across disturbed areas, thereby lessening the potential for erosion. Second, diversion structures can be used to collect or divert waters for later treatment, if necessary. The usefulness of these control measures are limited by such factors as the size of the area to be controlled and the type and nature of materials exposed and precipitation events.

Diversion dikes, curbs, and berms are temporary or permanent diversion structures that prevent runoff from passing beyond a certain point, and divert runoff away from its intended path. Dikes, curbs or berms may be used to surround and isolate areas of concern at metal mining sites, diverting flow around piles of overburden, waste rock, and storage areas, to minimize discharge contact with contaminated materials and to limit discharges of contaminated water from confined areas. The BMPs described below may be useful for storm water diversion at metal mining sites.

• *Channels or Gutters*—Channels or gutters collect storm water runoff and direct its flow. Channels or gutters may act to divert runoff away from a potential source of contamination, but may also be used to channel runoff to a collection and/or treatment area including settling ponds, basins or work-out pits.

• *Open Top Box Culverts, and Waterbars*—These structures are temporary or permanent structures that divert water from a roadway surface. Open top box culverts may be used on steeply graded, unpaved roads in place of pipe culverts to divert surface runoff and flow from inside ditches onto the downhill slope of a road. These structures are typically made of wood and should periodically be monitored and repaired if necessary.

• *Rolling Dips and Road Sloping*—Rolling dips and road sloping are permanent water diversion techniques installed using natural contours of the land during road construction. These BMPs prevent water accumulation on road surfaces and divert surface runoff toward road ditches, which then convey the storm water to ponds or other management areas.

• *Roadway Surface Water Deflector*—A roadway surface water deflector is another technique to prevent accumulation of water on road surfaces. The structure uses a conveyor belt sandwiched between two pieces of treated wood and placed within the road to deflect water. This is a useful technique for steeply graded, unpaved roads.

• *Culverts*—Culverts are permanent surface water diversion mechanisms used to convey water off of, or underneath a road. Made of corrugated metal, they must extend across the entire width of the road, and beyond the fill slope. Additional erosion control mechanisms may need to be installed at the discharge end of the culvert.

Drainage systems are most effective when used in conjunction with runoff dispersion devices designed to slow the flow of water discharged from a site. These devices also aid storm water infiltration into the soil and flow attenuation. Some examples of velocity dissipation devices include check dams, rock outlet protection, level spreaders, and serrated and benched slopes.

• *Check Dams*—Check dams are small temporary dams constructed across swales or drainage ditches to reduce the velocity of runoff flows, thereby reducing erosion and failure of the swale or ditch. This slowing reduces erosion and gullying in the channel and allows sediments to settle.

• *Rock Outlet Protection*—Rock protection placed at the outlet end of culverts, channels, or ditches reduces the depth, velocity, and destructive energy of water such that the flow will not erode the downstream reach.

• *Level Spreaders*—Level spreaders are outlets for dikes and diversions consisting of an excavated depression constructed at zero grade across a slope. Level spreaders diffuse storm water point sources and release it onto areas stabilized by existing vegetation.

• *Serrated Slopes and Benched Slopes*—These runoff dispersion methods break up flow of runoff from a slope, decreasing its ability to erode. Serrated and benched slopes provide flat areas that allow water to infiltrate, and space for vegetation to grow and reinforce soils.

• *Contouring*—Surface contouring is the establishment of a rough soil surface amenable to revegetation, through creating horizontal grooves, depressions, or steps that run with the contour of the land. Surface roughening aids in the establishment of vegetative cover by reducing runoff velocity and giving seed an opportunity to take hold and grow.

• *Drain Fields*—Drain fields are used to prevent the accumulation of water and/or ground water at a site, by diverting infiltrating sources through gravity flow or pumping.

• *Stream Alteration*—Altering or channelizing the path of a stream to bypass all or some disturbed areas on a site, allows additional mining activities, and avoids contamination of stream water by disturbed lands. This practice is complicated, however, by the need to restore the channel when mining operations end.

• *Drop Structures*—Drop structures are large angular rocks placed in a V-shaped pattern to slow the velocity of storm water runoff. These structures are typically reinforced by logs or large rocks imbedded in the streambanks.

(2) Erosion and sediment controls. Erosion and sediment controls limit movement and retain sediments from being transported offsite. Several structural collection devices have been developed to remove sediment from runoff before it leaves the site. Several methods of removing sediment from site runoff involve diversion mechanisms previously discussed, supplemented by a trapping or storage device.

Structural practices typically involve filtering diffuse storm water flows through temporary structures such as straw bale dikes, silt fences, brush barriers or vegetated areas.

Structural practices are typically low in cost. However, structural practices require periodic removal of sediment to remain functional. As such, they may not be appropriate for permanent use at inactive mines. However, these practices may be effectively used as temporary measures during active operation and/or prior to the final implementation of permanent measures.

(a) Structural Practices

• *Sediment/Settling Ponds*—Sediment ponds function as sediment traps by containing runoff for long periods of time, allowing suspended solids to settle. These structures can achieve a high removal rate of sediment for both process wastewater and storm water discharges.

Discharge ponds may also be designed to act as surge ponds which are designed to contain storm surges and then completely drain in about 24 to 40 hours, and remain dry during times of no rainfall. They can provide pollutant removal efficiencies that are similar to those of detention ponds.[65]

• *Gabions, Riprap, and Native Rock Retaining Walls*—These BMPs are all forms of slope stabilization. Gabions consist of rocks (riprap) contained by rectangular wire boxes or baskets for use as permanent erosion control structures. Riprap consists of loose rocks placed along embankments to prevent erosion.

• *Biotechnical Stabilization*—Biotechnical stabilization uses live

[65] "Urban Targeting and BMP Selection," EPA, Region V, November 1990.

brush imbedded in the soils of a steep slope to prevent erosion. This method relies on the premise that the imbedded vegetation will eventually root and help stabilize the slope.

• *Straw Bale Barrier*—Straw bales may be used as temporary berms, barriers, or diversions, capturing sediments, filtering runoff. When installed and maintained properly, these barriers remove approximately 67 percent of the sediment load.[66]

• *Sediment Traps or Catch Basins*—These temporary or permanent structures are useful for catching and storing sediment laden storm water runoff and are particularly useful during construction activities to contain runoff. The effectiveness of these BMPs is better in smaller drainage basin areas. Sediment traps are less than 50 percent effective in removing sediment from storm water runoff.[67]

• *Vegetated Buffer Strips*—The installation of vegetated buffer strips will reduce runoff and prevent erosion at a removal efficiency rate of 75 to 99 percent depending upon the ground cover.[68]

• *Silt Fence/Filter Fence*—A low fence made of filter fabric, wire and steel posts, should be used on small ephemeral drainage areas where storm water collects or leaves a mine site. Silt fences remove 97 percent of the sediment load and are easier to maintain and remove without creating lasting impacts to the environment.[69]

• *Siltation Berms*—Siltation berms are typically placed on the downslope side of a disturbed area to act as an impermeable barrier for the capture and retention of sediments in surface water runoff. Plastic sheeting is typically used to cover the berm. The berm and the plastic sheeting may require periodic maintenance and repair.

• *Brush Sediment Barriers*—Brush barriers are temporary sediment barriers composed of tree limbs, weeds, vines, root mat, soil, rock and other cleared materials placed at the toe of a slope. A brush barrier is effective only for small drainage areas, usually less than ¼ acre, where the slope is minimal.

(*b*) *Stabilization*—Stabilization practices involve establishing a sustainable ground cover by permanent seeding, mulching, sodding, and other such practices. A vegetative cover reduces the potential for erosion of a site by: absorbing the kinetic energy of raindrops which would otherwise impact soil; intercepting water so it can infiltrate into the ground instead of running off and carrying contaminated discharges; and by slowing the velocity of runoff to promote onsite deposition of sediment. Stabilization controls are often the most important measures taken to prevent offsite sediment movement, and can provide a six-fold reduction in the discharge of suspended sediment levels.[70] Permanent seeding has been found to be 99 percent effective in controlling erosion for disturbed land areas.[71] Many states require that topsoil be segregated from other overburden for use during reclamation. While stored, topsoil stockpiles should be vegetated. This temporary form of vegetation can often be used for other piles of stored materials and for intermittent/seasonal operations.

Typically, the costs of stabilization controls are low relative to other discharge mitigation practices. Given the limited capacity to accept large volumes of runoff, and potential erosion problems associated with large concentrated flows, stabilization controls should typically be used in combination with other management practices. These measures have been documented as particularly appropriate for mining sites.

• *Topsoiling, Seedbed Preparation*—The addition of a layer of topsoil or plant growth material provides an improved soil medium for plant growth. Seedbed preparation may include the addition of topsoil ingredients to be mixed in with soils used for seedbed preparation.

• *Broadcast Seeding and Drill Seeding*—Seeding and vegetative planting are methods used to revegetate an area. Broadcast seeding spreads seeds uniformly, by hand or machine, to steep sloped or rocky areas, flat surfaces, and areas with limited access.

• *Willow Cutting Establishment*—Willow cutting establishment describes a method of soil stabilization useful for stream banks and other areas located adjacent to water. Similar to biotechnical stabilization, willow cuttings are used to promote growth in an area needing stabilization. Willow cuttings are typically used to reinforce a streambank or other moist area.

• *Plastic Matting, Plastic Netting, and Erosion Control Blankets*—These BMPs are used to protect bare soils to control dust and erosion. Mats and blankets help to promote vegetative growth by maintaining moisture and heat within the soil.

• *Mulch-straw or Wood Chips*—Mulches and wood chips are useful temporary covers for bare or seeded soils, with an erosion control effectiveness rating of 75 to 98 percent.[72] Like matting, mulch-straw or wood chips help soils retain moisture and warmth to promote vegetative growth.

• *Compaction*—Soil compaction using a roller or other heavy equipment increases soil "strength" by increasing its density. More dense soil is less prone to erosion and long-term soil settlement.

(*3*) *Capping.* In some cases, the elimination of a pollution source through capping contaminant sources may be the most cost effective control measure for discharges from inactive ore mining and dressing facilities. Depending on the type of management practices chosen the cost to eliminate the pollutant source may be very high. Once completed, however, maintenance costs will range from low to nonexistent.

Capping or sealing of waste materials is designed to prevent infiltration, as well as to limit contact between discharges and potential sources of contamination. Ultimately, capping should reduce or eliminate the contaminants in discharges. In addition, by reducing infiltration, the potential for seepage and leachate generation may also be lessened.

EPA has identified a wide variety of best management practices (BMPs) that may be used to mitigate discharges of contaminants at active and inactive metal mines. Many of the practices focus on sediment and erosion control and are similar to BMPs used in the construction industry. These controls to prevent erosion and control sedimentation are the most effective if they are installed at the inception of operations and maintained throughout active operations and reclamation of the site. For more details on the use and implementation of these practices the reader is encouraged to obtain a copy of one or more of the many good sediment and erosion control books available on the market.[73] In some cases (e.g., low

[66] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–14.

[67] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–26.

[68] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–7.

[69] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–15.

[70] "Performance of Current Sediment Control Measures at Maryland Construction Sites," January 1990, Metropolitan Washington Council of Governments, page X.

[71] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–4.

[72] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990.

[73] "Best Management Practices for Mining in Idaho," Idaho Department of State Lands,

pH and/or high metals concentrations), BMPs, and sediment and erosion controls may not be adequate to produce an acceptable quality of storm water discharge. Under those circumstances additional physical or chemical treatment systems may be necessary to protect the receiving waters.

(4) *Treatment.* Treatment practices are those methods of control which normally are thought of as being applied at the "end of the pipe" to reduce the concentration of pollutants in water before it is discharged. This is in contrast to many BMPs, where the emphasis is on keeping the water from becoming contaminated. Treatment practices may be required where flows are currently being affected by exposed materials and other BMPs are insufficient to meet discharge goals. These practices are usually the most resource intensive, as they often require significant construction costs, and monitoring and maintenance on a frequent and regular basis. Treatment options may range from high maintenance controls to low maintenance controls. High maintenance treatment techniques require manpower to operate and maintain the BMP. Low maintenance cost techniques have initial capital costs but operate with low long-term maintenance after implemented. At a few sites, treatment measures other than high maintenance measures may be appropriate to address specific pollutants.

- *Chemical/Physical Treatment*—An example of a high maintenance technology that is found at many active metal mining facilities is chemical/physical treatment. The most common type of chemical/physical treatment involves the addition of lime or other such caustics to neutralize the discharges and/or precipitate metals. Metals may be removed from wastewater by raising the pH of the wastewater to precipitate them out as hydroxides.
- *Oil/Water Separators*—Another example of a high maintenance treatment technology is an oil/water separator. An American Petroleum Institute (API) oil/water separator or similar type of treatment device which acts to skim oil and settle sludge can be used to remove oil from water.
- *Artificial Wetlands*—This type of BMP system can be an effective system for improving water quality either alone or in conjunction with other treatment practices. Wetland processes are able to filter sediments, and absorb and retain chemical and heavy metal pollutants through biological degradation, transformation, and plant uptake.

Natural wetlands should not be considered as part of the treatment system because they are considered to be waters of the United States. The necessary controls, or BMPs, must be provided prior to discharging the storm water runoff to natural wetlands or other receiving waters.

In summary, a wide variety of BMPs are available for use at active and inactive metallic mining and milling facilities. These measures range from simple low cost, low maintenance source reduction practices such as diversion structures to high cost, maintenance intensive practices such as wetlands treatment. Clearly, the selection of a practice or group of practices will be site-specific depending on conditions and potential impacts as well as the resources available at each site. A specific best available technology (or technologies) cannot be determined because of the differences between sites and the quantities and characteristics of their discharges.

4. Discharges Covered Under This Section

Coverage under this section of today's proposed permit is limited to all storm water discharges from inactive metal mining facilities and storm water discharges from the following areas of active metal mining facilities:

- Topsoil piles;
- Offsite haul/access roads if off active area;
- Onsite haul roads if not constructed of waste rock or spent ore, and mine water is not used for dust control;
- Runoff from tailings dams/dikes when not constructed of waste rock/tailings and no process fluids are present;
- Concentration building, if no contact with material piles;
- Mill site, if no contact with material piles;
- Chemical storage area;
- Docking facility, if no excessive contact with waste product;
- Explosive storage;
- Reclaimed areas released from reclamation bonds prior to December 17, 1990; and
- Partially/inadequately reclaimed areas or areas not released from reclamation bonds.

Storm water discharges, or mine drainage discharges, which are subject to existing effluent limitations guidelines addressing storm water (or a combination of storm water and non-storm water) cannot be covered by this section. The effluent limitations guidelines that apply to active metal mining operations are contained in 40 CFR part 440, Ore Mining and Dressing Point Source Category. These effluent guidelines include specific numeric limitations for mine drainage and discharges from mills, or "no discharge" requirements. Table G–4 identifies the discharge and source of the discharge from active metal mining facilities, that are subject to process wastewater limitations, mine drainage limitations, and storm water reporting requirements. Those discharges/sources of discharges that have "SW" in the second column (Applicable ELG), may be covered under this section of today's permit. At all metal mining facilities, coverage under this section does not include adit drainage or contaminated springs or seeps.

TABLE G–4.—APPLICABILITY OF 40 CFR PART 440 EFFLUENT LIMITATIONS GUIDELINES TO STORM WATER RUNOFF FROM ACTIVE ORE (METAL) MINING AND DRESSING SITES

Discharge/source of discharge	Applicable ELG, if any (see key)	Note/comment
Land application area runoff	MD	PW—if Process fluids present.
Crusher area	MD	PW—if Process fluids present.
Piles (seepage and/or runoff):		
Spent ore	MD	PW—if Process fluids present.
Surge/Ore	MD	PW—if Process fluids present.
Waste rock/overburden	MD	
Topsoil	SW	

November 1992; "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September 1992, (EPA 832–R–92–005); and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

TABLE G–4.—APPLICABILITY OF 40 CFR PART 440 EFFLUENT LIMITATIONS GUIDELINES TO STORM WATER RUNOFF FROM ACTIVE ORE (METAL) MINING AND DRESSING SITES—Continued

Discharge/source of discharge	Applicable ELG, if any (see key)	Note/comment
Drainage:		
Pit drainage (unpumped)	MD	
Pit drainage (removed by pumping)	MD	
Mine water from underground mines (unpumped), adit discharges.	MD	
Mine water from underground mines (pumped)		
Seeps/French drains	MD	PW—if Process fluids present.
Roads constructed of waste rock or spent ore:		
Onsite haul roads	MD	
Offsite haul/access roads	SW	(if off Active Area)
Roads not constructed of waste rock or spent ore:		
Onsite haul roads	SW	MD—if dust control with MD water.
Offsite haul/access roads	SW	
Milling/concentrating:		
Tailings impoundment/pile	PW	
Runoff from tailings dams/dikes when constructed of waste rock/tailings.	MD	PW—if Process fluids present.
Runoff from tailings dams/dikes when not constructed of waste rock/tailings.	SW	PW—if Process fluids present.
Heap leach pile runoff/seepage	PW	
Pregnant pond (barren and surge ponds also)	PW	
Polishing pond	PW	
Concentration building	SW	If storm water only, and no contact with piles.
Concentrate pile (product storage)	PW	
Mill site	SW	Same as concentration bldg.
Ancillary areas:		
Office/administrative building and housing	UC	Unless mixed with SW from industrial area, then SW.
Chemical storage area	SW	
Docking facility	SW	Excessive contact with waste product could constitute MD.
Explosive storage	SW	
Fuel storage (oil tanks/coal piles)	SW	
Vehicle/equipment maintenance area/building	SW	
Parking areas	SW	UC if only employee and visitor type parking.
Power plant	SW	
Truck wash area	SW	Excessive contact with waste product could constitute MD.
Reclamation-related areas:		
Any disturbed area (unreclaimed)	MD	SW if inactive area.
Reclaimed areas released from reclamation bonds after Dec. 17 1990.	UC	
Reclaimed areas released from reclamation bonds prior to Dec. 17 1990.	SW	
Partially/inadequately reclaimed areas or areas not released from reclamation bond.	SW	

KEY:
UC—Unclassified; Not Subject to Storm Water Program or 40 CFR Part 440 Effluent Limitations Guidelines (ELG).
MD—Subject to 40 CFR Part 440 ELG for mine drainage.
PW—Subject to 40 CFR Part 440 ELG for mill discharge or process (including zero discharge ELG).
SW—Storm water runoff from these sources are subject to the Storm Water Program, but are not subject to 40 CFR 440 ELG unless mixed with discharges subject to the 440 CFR 440 ELG that are not regulated by another permit prior to mixing. Non-storm water discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR 440.

Temporarily inactive (e.g., winter closure, and portions of active mines that are no longer being mined, and where reclamation has not begun) mines will be permitted as an active mine. The following definitions apply to this section and are intended to provide clarification as to what is considered active, inactive, and temporarily inactive:

The following definitions are only for this section of today's proposed permit and are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii):

Active Metal Mining Facility" is a place where work or other related activity to the extraction, removal, or recovery of metal ore is being conducted. With respect to surface mines, an "active metal mining facility" does not include any area of land on or in which grading has been completed to return the earth to a desired contour and reclamation work has begun.

"*Inactive Metal Mining and Dressing Facility*" means a site where metal mining and/or milling activities occurred in the past but is not an active metal mining facility, as defined in this section. The term means a site where reclamation subject to applicable State or Federal reclamation requirements has begun but has not been completed and/or the reclamation bond has not been released. The term also includes a site where the mining and/or milling activities occurred prior to the establishment of applicable State and/or Federal reclamation requirements or where there has been no mining or milling activities in the 10 years prior to the effective date of today's proposed permit. This definition also includes storm water discharges associated with industrial activity from inactive mine

sites occurring on non-Federal lands where an operator cannot be identified.

"*Temporarily Inactive Metal Mining Facility*" means a site where metal mining and/or milling activities occurred in the past, but are not being actively undertaken and the criteria for being considered an inactive metal mining facility are not met.

Operators of storm water discharges from mining related industrial activities such as vehicle maintenance, or power plants should refer to the appropriate sections of today's proposed permit for specific guidance or requirements. Clearing, grading, and excavation activity that disturbs 5 or more acres during the exploration or preparation for beginning active mining operations cannot be covered by this section. Coverage for this type of pre-mining activity can be covered by EPA's general permit for storm water discharges from construction activities or an applicable State-issued permit. Land disturbance activities associated with the active mining operations such as expansion of existing pits, can be covered by this section.

5. Storm Water Pollution Prevention Plan Requirements. All facilities subject to this section must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of ore mining and dressing facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provide a flexible framework for the development and implementation of site specific controls to minimize pollutants in storm water discharges. This approach is consistent with the approach used in the baseline general permits finalized on September 9, 1992 (57 FR 41236).

Pollution prevention can be an effective approach for controlling contaminated storm water discharges from metal mining facilities. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as: facility size; climate; geographic location; geology/hydrology; the environmental setting of each facility; and volume and type of discharge generated. This flexibility is necessary because each facility will be unique in that the source, type, and volume of contaminated surface water discharges will differ from site to site. In addition, EPA believes that the adoption of BMPs reduces environmental impacts by minimizing land disturbed areas susceptible to storm water runoff. Early implementation and maintenance of BMPs facilitates ongoing reclamation activities, reducing final reclamation costs associated with site closure. BMPs are also effective at temporarily or permanently inactive mine sites.

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

Specific requirements for a pollution prevention plan for ore mining and dressing facilities are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

a. Active and temporarily inactive metal mining facilities

(1) Description of mining activities. The storm water pollution prevention plan shall provide a narrative description of the mining and associated activities taking place at the site which affect or may affect storm water runoff intended to be covered by this section. The narrative description shall report the total acreage within the mine site, an estimate of the acreage of land currently disturbed, and an estimate of the total acreage that will be disturbed throughout the life of the mine. A general description of the mining site relative to major transportation routes and communities shall also be provided.

(2) Description of potential pollution sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows and mine pumpout. This assessment of storm water pollution will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. In addition to the baseline general requirements storm water pollution prevention plans must describe the following elements:

(a) Drainage—The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in storm water runoff[74] and process wastewater discharges (including mine drainage), surface water bodies (including wetlands), places where significant materials[75] are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of today's proposed permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, waste disposal, haul roads, access roads, and rail spurs. In addition, the site map must identify monitoring locations.

(b) Inventory of exposed materials—Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the effective date of today's proposed permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

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[74] Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

[75] Significant materials include, "* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under section 101(14) of CERCLA; any chemical facilities required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges" (40 CFR 122.26(b)(12)). Significant materials commonly found at mining facilities include: overburden; raw materials; waste rock piles; tailings; petroleum based products; solvents and detergents; heap leach pads; tailings piles/ponds, both proposed and existing; and manufactured products, waste materials or by-products used or created by the facility.

In addition, any existing ore or waste rock/overburden characterization data, including results of testing for acid rock generation potential must be included in the pollution prevention plan. The intent is to get an idea of the pollutants (e.g., heavy metals) that may be present in the ore and waste rock/overburden.

(3) Measures and controls. Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. The permittee must assess the applicability of the following BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, sediment control and collection mechanisms, vegetation/soil stabilization, capping of contaminated sources, and treatment of storm water discharges. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

Under the inspection requirements of the pollution prevention plan, operators of active facilities are required to conduct monthly visual inspections of BMPs and storm water quality of each discharge associated with an industrial activity. Owner/operators of temporarily inactive mining sites are required to conduct annual visual monitoring. If weather conditions make the mine site inaccessible, the quarterly inspection will not be required. Active mining sites have frequent inspection periods because members of the pollution prevention team will be onsite, and the fact that they are active means there is a greater potential for pollution. The inspections shall include: (1) An assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures; (2) visual inspections of vegetative BMPs, serrated slopes, and benched slopes to determine if soil erosion has occurred; and (3) visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

Under the employee training requirements of the pollution prevention plan, facility operators are required to conduct employee training programs at least semiannually. The intent of this frequency is to provide a reminder to the employees of the requirements of the storm water pollution prevention plan.

(4) Non-storm water discharges. Each pollution prevention plan must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water discharges, including discharges that are subject to 40 CFR part 440. The certification must describe possible significant sources of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Pollution prevention plans must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water discharge.

Under the non-storm water discharge section of the pollution prevention plan, EPA will allow non-storm water discharges that mix with storm water under this section provided that the plan includes a certification that any non-storm water discharge which mixes with storm water is subject to a separate NPDES permit that applies applicable effluent limitations prior to the mixing of non-storm water and storm water. In such cases, the certification shall identify the non-storm water discharge(s), the applicable NPDES permit(s), the effluent limitations placed on the non-storm water discharge by the NPDES permit(s), and the point(s) at which the limitations are applied.

b. Inactive metal mining facilities

(1) Pollution prevention team. The storm water pollution prevention plan must identify specific individual(s) who are responsible for the development, implementation, maintenance, and revision of the pollution prevention plan. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the storm water pollution prevention plan at the inactive facility. Members of the pollution prevention team do not have to be permanently located at the inactive facility, such as the requirement for any active facility.

(2) Description of mining activities. The storm water pollution prevention plan shall provide a narrative description of the mining and associated activities that took place at the site. The narrative description shall report the approximate dates of operation, total acreage within the mine site and/or processing site, an estimate of the total acreage disturbed, and the activities (reclamation etc.) that are currently taking place at the facility. A general description of the mining site relative to major transportation routes and communities shall also be provided.

(3) Description of potential pollution sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows. This assessment of storm water pollution will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. In addition to the baseline general requirements storm water pollution prevention plans must describe the following elements:

(a) Drainage—The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in storm water runoff[76] and process wastewater discharges (including mine drainage), surface water bodies (including wetlands), places where significant materials[77] are exposed to rainfall and runoff. The map also must show the location of the following: any remaining equipment storage, fueling, and maintenance areas; areas used for

[76] Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

[77] Significant materials include, "* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under section 101(14) of CERCLA; any chemical facilities required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge" (40 CFR 122.26(b)(12)). Significant materials commonly found at mining facilities include: overburden; raw materials; waste rock piles; tailings; petroleum based products; solvents and detergents; heap leach pads; tailings piles/ponds, both proposed and existing; and manufactured products, waste materials or by-products used or created by the facility.

outdoor manufacturing, storage, or disposal of materials; the boundaries of former mining and milling sites; the location of each storm water outfall and an outline of the portions of the drainage area that are within the facility boundaries; tailings piles and ponds; mine drainage or any other process water discharge point; and an estimate of the direction of flow.

(*b*) *Inventory of exposed materials*—The storm water pollution prevention plan shall include, for each outfall, an inventory and narrative description of any significant materials that may still be at the site. The description and locations of the significant materials should be consistent with those shown on the site map. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system.

(*c*) *Risk identification and summary of potential pollutant sources*—The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids, arsenic, etc.) associated with each source.

(*d*) *Measures and controls.* Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. The permittee must assess the applicability of the following BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, sediment control and collection mechanisms, vegetation/soil stabilization, capping of contaminated sources, and treatment of storm water discharges. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff. EPA recognizes that inactive mine sites and abandoned mine sites will most likely require different storm water controls because the sources and types of contamination may vary.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

(*5*) *Comprehensive site compliance evaluation.* Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in 3 years.

6. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that active metal mining facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires active ore mining and dressing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table G–5. The pollutants listed in Table G–5 were found to be above levels of concern for a significant portion of active ore mining and dressing facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at levels of concern from active ore mining and dressing facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

Today's proposed permit only requires active ore mining and dressing facilities to monitor their storm water discharges. EPA requests comment as to whether monitoring requirements should be expanded to temporarily inactive or inactive facilities. EPA also requests comment as to whether the scope of the discharges which must be monitored could be focused on particular discharges of stormwater from active metal mining facilities.

At a minimum, storm water discharges from active metal mining facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table G–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE G–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Chemical Oxygen Demand (COD).	65 mg/L
Total Suspended Solids (TSS).	100 mg/L
Total Kjeldahl Nitrogen (TKN).	1.5 mg/L
Nitrate plus Nitrite Nitrogen.	0.68 mg/L
Total Phosphorus	0.33 mg/L
Ammonia	0.093 mg/L
Total Recoverable Antimony.	0.088 mg/L
Total Recoverable Arsenic.	.000018 mg/L
Total Recoverable Copper.	0.009 mg/L
Total Recoverable Iron.	0.3 mg/L
Total Recoverable Lead.	0.0337 mg/L
Total Recoverable Manganese.	0.05 mg/L
Total Recoverable Zinc.	0.065 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table G–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table G–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit

coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE G–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table G–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table G–5, then no further sampling is required for that parameter.
4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table G–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table G–5 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table G–5. Facilities that achieve average discharge concentrations which are less than or equal to the values in Table G–5 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. of the permit (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Visual examination of storm water quality. The inspection must be of a grab sample collected from each storm water outfall. Visual inspections of storm water discharges from each outfall at active and temporarily inactive mining facilities are required. The examination of storm water quality at active mining facilities must be conducted at least once a month. Temporarily inactive mining facilities must make the examination at least once a year (consistent with the Comprehensive Site Compliance Evaluation). Visual examination of storm water quality at inactive mining facilities is not required. EPA requests comment on the frequency requirements for the examination of storm water

quality at active, temporarily inactive, and inactive mining facilities. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.G. of today's proposed permit.

a. Monitoring Requirements for Active and Temporarily Inactive Metal Mining Facilities. During the period beginning 1 year after the effective date and lasting through the expiration date of this permit, permittees must monitor all storm water discharges (each outfall at the facility for the parameters identified below) at least quarterly (4 times per year) except as provided in VI.E. (Sampling Waiver and Representative Discharge). A grab sample may be collected. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. In addition to analyzing the discharge for the parameters listed below, the permittee shall record the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; an estimate of the total volume (in gallons) of the discharge sampled; an estimate of the runoff coefficient of the drainage area; and the status of the facility (active, temporarily inactive, permanently inactive, or undergoing reclamation). Table G–7 indicates the parameters to be monitored and frequency for all facilities in the metal mining section.

TABLE G–7.—ORE MINING AND DRESSING: MONITORING REQUIREMENTS

Parameter	Unit	Frequency [1]	Sample type
Total Flow	MG	Quarterly	Estimate.
pH	S.U.	Quarterly	Grab.
Total Settleable Solids	ml/L	Quarterly	Grab
Total Suspended Solids	mg/L	Quarterly	Grab.
Nitrate and Nitrite as N	mg/L	Quarterly	Grab.

[1] The quarters are defined as December to February, March to May, June to August, and September to November.

b. Monitoring requirements for inactive metal mining facilities. There are no monitoring requirements for storm water discharges from inactive metal mining facilities unless notified by the permit issuing authority.

c. *Reporting: when to submit.* The permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than 12 months of information.

8. Numeric Effluent Limitations

There are no numeric effluent limitations beyond those described in Part VI.F. of this fact sheet.

H. Storm Water Discharges Associated With Industrial Activity From Coal Mines and Coal Mining-Related Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water associated with industrial activity." This definition includes point source discharges of storm water from eleven major categories of facilities, including: "* * * (iii) facilities classified as Standard Industrial Classification (SIC) codes 10 through 14 including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of noncoal mining operations

which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or storm water contaminated by contact with any overburden, raw material, intermediate products, finished products, by-products or waste products located on the site of such operations."

This section only covers storm water discharges associated with industrial activities from inactive[78] coal mines and from access roads, haul roads, and rail lines at active coal mines. Coal mines and coal mining facilities subject to requirements under this section include the following types of operations:

- Bituminous Coal and Lignite Surface Mining (SIC 1221).
- Bituminous Coal Underground Mining (SIC 1222).
- Anthracite Mining (SIC 1231).
- Coal Mining Services (SIC 1241).

Storm water discharges authorized by this section include storm water discharges at inactive coal mines where precipitation and storm water runon come into contact with significant materials including, but not limited to, raw materials, waste products, and by-products, overburden, and stored materials. This section also authorizes storm water discharges from haul roads, access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by active coal mining facilities. The following activities are covered under this section:

- *Haul Roads*—Nonpublic roads on which coal or coal refuse is conveyed.
- *Access Roads*—Nonpublic roads providing light vehicular traffic within the facility property and to public roadways.
- *Railroad Spurs, Sidings, and Internal Haulage Lines*—Rail lines used for hauling coal within the facility property and to offsite commercial railroad lines or loading areas.
- *Conveyor Belts, Chutes, and Aerial Tramway Haulage Areas*—Areas under and around coal or refuse conveyor areas, including transfer stations.
- *Equipment Storage and Maintenance Yards*—
- *Coal Handling Buildings and Structures*—
- *Inactive Coal Mines and Related Areas*—Abandoned and other inactive mines, refuse disposal sites and other mining-related areas. This includes abandoned mine sites being reclaimed under Title IV of the Surface Mining Control and Reclamation Act. Not covered by this section are discharges from sites, or parts of sites, which are determined to cause or contribute to water quality standards violations.

This section does not cover any discharge subject to effluent limitation guidelines. Discharges from active facilities and those under reclamation are subject to NPDES permits and require treatment to meet specific effluent guideline limits as specified in 40 CFR Part 434 for pH, iron, manganese, suspended solids, and settleable solids. Storm water that does not come into contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation are not subject to permitting under this section according to Section 402(l)(2) of the Clean Water Act. This section also does not apply to discharges for sites on Federal lands on which a claim has been established under the General Mining Laws but where no mining activities have been undertaken other than nominal claim-holding activities required by the Mining Law and applicable regulations.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

Industry Profile

Coal is a black, primarily organic substance formed from compressed layers of decaying organic matter millions of years ago.[79] Factors such as the fixed carbon content, volatile matter fraction, and heating value, determine whether coal is classified as lignite, sub-bituminous, bituminous, or anthracite. The coal mining and related facilities industry extracts and processes coal. There are two methods of coal mining: surface mining and underground mining. Surface mining is a method utilized when the coal is close to the earth's surface and it is economically viable to remove and store the overburden, which can later be used for reclamation. Underground mining occurs when coal is too deep to be surface mined or environmental restrictions prohibit surface mining.

Coal preparation activities increase the value of coal by removing impurities through size reduction, screening, gravity separation, dewatering, and drying. After this step, coal is ready to be shipped for further processing. The impurities, including shales, clays, low reject coal, and possibly some acidic materials, are then conveyed to refuse disposal facilities.

These mining methods and coal preparation activities occur during the active phase of mining and are not authorized by this section nor are they included in the storm water regulation. Most areas at active mine sites are covered by the Surface Mining Control and Reclamation Act (SMCRA). Discharges from these areas are considered process wastewaters and are covered under a separate NPDES permit. Today's proposed permit only addresses storm water discharges from coal mines and related areas that are not already subject to effluent limitation guidelines under 40 CFR part 434. Storm water discharges not subject to the effluent limitation guidelines may include discharges from the following areas:

A. Access roads, haul roads, and rail lines. Access roads, haul roads, and rail lines are used for the transportation of coal, refuse (waste materials, old equipment, etc.), and overburden away from the mine workings. To build access and haul roads, common land disturbing activities such as vegetation clearing and soil grading are necessary. Refuse coal and overburden may be used as a road base material. Road building activities increase the potential for the offsite discharge of sediment in storm water runoff. In addition, coal, overburden, and refuse materials may be spilled during loading and unloading operations and during the transport of

[78] Inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator.

[79] "Development Document for Final Effluent Limitations Guideline, New Source Performance Standards, and Pretreatment Standards for the Coal Mining Point Source Category." EPA. 1982.

such materials along access roads, haul roads, and rail spurs.

b. Inactive mine sites. Although industrial processes have ended at inactive mine sites, the significant materials associated with those industrial processes may remain at the site and contaminate storm water discharges. The areas at inactive surface or underground coal mines which are included in the storm water regulation include former locations of: Conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal preparation plants; and coal handling buildings and storage areas.

Inactive mine sites are regulated because significant materials remain onsite. The significant materials include, but are not limited to: Coal piles, including coal refuse piles; used and old equipment, including boneyards; overburden; solvents; cleaning agents; contaminated soils and sediments; waste disposal sites; waste materials; tailings; and sludges. These materials are typically stored outdoors and are exposed to storm water discharges.

2. Pollutants Found in Storm Water Discharges

Impacts caused by storm water discharges from active haul roads, access roads and rail lines and inactive coal mine and coal mining-related facilities will vary. Several factors influence to what extent significant materials from coal mines and coal mining-related facilities may affect water quality. Such factors include: geographic location; hydrogeology; the type of coal extracted; the mineralogy of the extracted resource and the surrounding rock; how the coal was extracted; the type of industrial activities occurring onsite; the size of the operation; and type, duration, and intensity of precipitation events. Each of these, and other, factors will interact to influence the quantity and quality of storm water runoff. For example, overburden may be a significant source of pollutants at some facilities, while storage areas are a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,[80] spills, and other improperly dumped materials, may increase the pollutant loads discharged into waters of the United States.

Storm water discharges from haul roads of active sites and inactive mine sites may include many of the pollutants common to active coal mining operations. These pollutants may include acids, suspended solids, dissolved solids, iron, manganese, and traces of other metals. Table H–1 indicates the pollutant sources and pollutants for a number of industrial activities for coal mines authorized by this section.

Another problem at coal mines is acid mine drainage. In general, the problems of acid mine drainage is confined to western Maryland, northern West Virginia, Pennsylvania, western Kentucky, and along the Illinois-Indiana border. Acid mine drainage is not a problem in the West because the coals and overburden contain little pyrite, the precursor for acid mine drainage, and because of low annual precipitation.

TABLE H–1.—ACTIVITIES, POLLUTANT SOURCES, POLLUTANTS

Activity	Pollutant source	Pollutants
Road and Rail Construction and Maintenance—Active Sites.	Surface grading and exposure of soils	Dust, TSS, TDS, turbidity, pH.
Raw or Waste Material Transportation	Material spills	Dust, TSS, TDS, turbidity, pH, sulfates, iron.
Location of Mining and Processing Activities at Inactive Coal Mines.	Raw Material Storage	Dust, TSS, TDS, turbidity, pH sulfates, iron.
	Waste Rock Storage	Dust, TSS, TDS, turbidity, sulfates, iron, pH.
	Disposal Areas	Dust, TSS, TDS, turbidity, pH, oil & grease.
	Surface and Underground Mines	Dust, TSS, TDS, turbidity, pH, sulfates, iron.
	Materials Handling and Loading/Unloading	Dust, TSS, TDS, turbidity, pH, sulfates, iron.
Equipment/Vehicle Maintenance	Fueling Activities	Diesel fuel, gasoline, oil, COD.
	Parts Cleaning	Solvents, oil, heavy metals, acid/alkaline wastes.
	Waste disposal of oily rags, oil and gas filters, batteries, coolants, degreasers.	Oil, heavy metals, solvents, acids, COD.
Reclamation Activities	Site preparation for stabilization	Dust, TSS, TDS, turbidity.

Sampling data was submitted jointly by the American Mining Congress and the National Coal Association for the group permit. The AMC/NCA group sampling effort was representative of applicants and activities in several key areas. For example, 75 percent are located in EPA storm water rainfall district no. 2 (KY, WV, IN, ILL, TN area); 70 percent operate alkaline mines, 30 percent acidic mines; 88 percent use haul roads onsite; 80 percent transport coal over haul roads; 70 percent transport refuse; and, for sediment and erosion control, 78 percent include sediment traps and 51 percent use straw bale barriers and channel protection. The samples taken reflected these locations and activities.

Less than 35 percent of the designated sampling facilities have submitted part 2 data, which is less than four percent of the coal mines participating in the group application process. In addition, a number of data submittals did not submit data for flow-weighted composite samples. A summary of the sampling data analyzed for conventional mining pollutants is listed in Table H–2. Median concentrations for suspended solids (TSS) and iron concentrations merit attention. The few settleable solids samples collected by the applicants indicate levels more than 20 times larger than the 0.5 mg/L limit for storm water discharges from surface mines sedimentation ponds. Sampling data on acid, other metals, oil and grease, and other pollutants revealed relatively low concentrations. The pH values appear to be in the neutral range.

[80] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at coal mines and coal mining related facilities is low yet it still may be applicable at some operations.

TABLE H–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[1]

[mg/L, Except as Noted]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	7	4	3.6	6.6	0.2	1.0	9.0	17.4	1.8	3.9	9.0	17.4	9.0	17.4
COD	13	8	16.5	26.9	0.0	0.0	83.9	115.0	6.0	135.0	83.9	115.0	83.9	115.0
Nitrate + Nitrite Nitrogen	8	6	0.8	1.0	0.0	0.0	3.1	3.1	0.4	0.6	3.1	3.1	3.1	3.1
Total Kjeldahl Nitrogen	9	8	2.6	2.6	0.0	0.2	5.2	7.4	2.6	1.2	5.2	7.4	5.2	7.4
Oil & Grease	19	N/A	2.2	N/A	0.0	N/A	13.9	N/A	1.2	N/A	13.9	N/A	13.9	N/A
pH (s.u.)	21	N/A	N/A	N/A	5.9	N/A	8.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	8	5	0.1	0.1	0.0	0.0	0.7	5.8	0.04	0.0	0.7	0.6	0.7	0.6
Tot. Suspended Solids	10	8	5,607	689	4	106	33,420	3,880	150	251	33,420	3,880	33,420	3,880
Iron	13	10	193.9	53.3	0.6	1.1	930	294	9.2	11.0	930.0	294.0	930.0	294.0

[1] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

Storm water discharges from inactive and abandoned coal mines, preparation, refuse disposal sites, haul roads and other inactive mining-related areas may contain substantial amounts of pollutants without the benefits of sediment and erosion control measures. Sampling data in the EPA 1982 "Development Document for Effluent Guidelines and Standards for Coal Mining" reveal typical ranges for untreated mine drainage and are indicated in Table H–3. The data are based on untreated surface and underground drainage and may not be typical of inactive sites subject only to storm water runoff. For example, a high proportion of underground mines in the survey may have resulted in the relatively low median levels of suspended solids. However, it does indicate the potential array of conventional mining pollutants which could be present in abandoned mine drainage.

3. Options for Controlling Pollutants

Mining facilities are often dissimilar to other types of industrial facilities because they may be situated in remote locations, operate only seasonally or intermittently, yet need year-round storm water management controls. EPA believes that the most effective storm water management controls for limiting the offsite discharge of storm water pollutants from active and inactive coal mines are source reduction BMPs. Source reduction BMPs are methods by which discharges of contaminants are controlled with little or no required maintenance. Examples of these types of controls include source reduction diversion dikes, vegetative covers, and berms. Source reduction practices are typically (but not always) low in cost and relatively easy to implement. In some instances, more resource intensive treatment BMPs, including sedimentation ponds and infiltration trenches, may be necessary depending upon the type of discharge, types and concentrations of contaminants, and volume of flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with active and inactive coal mines.

The following seven categories describe best management practice options for reducing pollutants in storm water discharges from haul and access roads for active coal mines and for inactive mines:

- Discharge Diversions.
- Drainage/Storm Water Conveyance Systems.
- Runoff Dispersion.
- Sediment Control and Collection.
- Vegetation/Soil Stabilization.
- Capping of Contaminated Sources.
- Treatment.

BMPs that minimize erosion and sedimentation are effective for areas along haul and access roads, and for inactive mines. Many BMPs were not listed by part 1 group application participants because the major application submitted by the National Coal Association and the American Mining Congress was comprised of only active mine sites. The only portions of an active mine site to which this section of today's permit applies are haul roads, railways, and conveyor belts, chutes, and aerial tramway haulage areas. Because the scope of storm water program, as it applies to active coal mining sites, is limited, the applicants were not required to provide EPA with BMP data for process wastewater discharges. Furthermore, active surface mines are subject to 30 CFR Part 816 and active underground mines are subject to 30 CFR Part 817, both which require the implementation of BMPs.

TABLE H—3. WASTEWATER CHARACTERIZATION SUMMARY FOR RAW WASTEWATER

[mg/L, except as noted]

Compound	Total detects	Minimum	Median	Mean	Maximum
TSS	97	0.5	57.5	10,160	240,000
pH	100	2.4	7.5	6.9	9.4
Iron	104	0.1	2.2	257	9,000
Manganese (Total)	94	0.003	1.08	5.19	80
Asbestos (fibers/liter)	9	3,500,000	1,090,000,000	9,372,000,000	41,000,000,000
COD	52	40	34	10,090	222,000
TDS	58	71	730	1,130	3,200
Total Volatile Solids	41	10	222	5,988	80,510
Volatile Suspended Solids	22	1	4.8	1,418	28,000
Settleable Solids	53	0	0.7	0.12	1.8
Total Organic Carbon	49	0.2	14.1	1,322	26,470
Free Acidity	6	19	41	181	740
MO Alkalinity	33	0.01	190	382	5,400
Phenolics	11	0.002	0.02	0.033	0.155
Sulfate	6	130	503	659	1,530
Total Acidity	1	10.5	10.5	10.5	10.5
Total Solids	55	160	1,326	11,800	190,000

Source: "Development Document for Final Effluent Limitations Guideline, New Source Performance Standards, and Pretreatment Standards for the Coal Mining Point Source Category." EPA. 1982.

Since many coal facilities are required to have BMPs, the data presented in part 1 of the application may underestimate the percentage of facilities with storm water BMPs.

Because BMPs described in the part I data are limited, EPA is providing an overview of supplementary BMPs for use by facility operators to determine appropriate BMPs for haul and access roads at active coal mines and for inactive coal mines. However, due to the site-specific nature of facilities within this sector, BMPs cited do not preclude the use of other viable BMP

options. Table H–4 summarizes BMP options as they apply to land disturbance activities at active and inactive coal mining facilities. Sources of BMP information include: "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990; "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September, 1992, (EPA 832–R–92–006); "Best Management Practices for Mining in Idaho," Idaho Department of Lands, November 1992; and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

TABLE H–4.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES

Land-disturbed area	Discharge diversions	Conveyance systems	Runoff dispersion	Sediment control & collection	Vegetation	Containment
Haul Roads and Access Roads.	Dikes, Curbs, Berms.	Channels, Gutters, Culverts, Rolling Dips, Road Sloping, Roadway Water Deflectors.	Check Dams, Rock Outlet Protection, Level Spreaders, Stream Alteration, Drop Structures.	Gabions, Riprap, Native Rock Retaining Walls, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetated Buffer Strips.	Seeding, Willow Cutting Establishment.	
Pits/Quarries or Underground Mines.	Dikes, Curbs, Berms.	Channels, Gutters	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Sediment Settling Ponds, Straw Bale Barrier, Siltation Berms.	Seeding	Plugging and Grouting.
Overburden, Waste Rock and Raw Material Piles.	Dikes, Curbs, Berms.	Channels, Gutters	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Plastic Matting, Plastic Netting, Erosion Control Blankets, Mulch-straw, Compaction, Sediment/Settling Ponds, Silt Fences, Siltation Berms.	Topsoiling, Seedbed Preparation, Seeding.	Capping.
Reclamation	Dikes, Curbs, Berms.	Channels, Gutters,.	Check Dams, Rock Outlet Protection, Level Spreaders, Serrated Slopes, Benched Slopes, Contouring, Drain Fields, Stream Alteration, Drop Structures.	Gabions, Riprap, and Native Rock Retaining Walls, Biotechnical Stabilization, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetative Buffer Strips, Silt Fences, Siltation Berms, Brush Sediment Barriers.	Topsoiling, Seedbed Preparation, Seeding, Willow Cutting Establishment.	Capping, Plugging and Grouting.

• *Haul Roads and Access Roads*—Placement of haul roads or access roads should occur as far as possible from natural drainage areas, lakes, ponds, wetlands or floodplains where soil will naturally be less stable for heavy vehicle traffic. If a haul road must be constructed near water, as little vegetation as possible should be removed from between the road and the waterway, as vegetation is a useful buffer against erosion and is an efficient sediment collection mechanism. The width and grade of haul or access roads should be minimal and should be designed to match natural contours of the area. Construction of haul roads should be supplemented by BMPs that divert runoff from road surfaces, minimize erosion, and direct flow to appropriate channels for discharge to treatment areas. Existing haul roads and nearby ditches, without BMPs, can be altered or modified to accommodate the construction of BMPs.

• *Surface Mines*—BMPs can be used to control total suspended solids levels in runoff from unvegetated areas. These can include sediment/settling ponds, check dams, silt fences, and straw bale barriers.

• *Overburden, Waste Rock, and Raw Material Piles*—Overburden, topsoil, and waste rock should be stabilized, recontoured if necessary, and vegetated. In addition surface waters and other sources of water should be diverted around the piles. As many piles as possible should be revegetated (even if only on a temporary basis).

• *Reclamation Activities*—When a coal seam is depleted and operations cease, a mine site must be reclaimed according to appropriate State or Federal standards. Closure activities typically include restabilization of any disturbed areas such as access or haul roads, pits or quarries, sedimentation ponds or work-out pits, and any remaining waste piles. Overburden and topsoil stockpiles may be used to fill in a pit or quarry (where practical.) Recontouring and vegetation should be performed to stabilize soils and prevent erosion.

Major reclamation activities such as recontouring roads and filling in a pit or

quarry can only be performed after operations have ceased. However, reclamation activities such as stabilization of banks, and reseeding and revegetation should be implemented in mined out portions, or inactive areas of a site as active mining moves to new areas.

a. Discharge diversions. Discharge diversions provide the first line of defense in preventing the contamination of discharges, and subsequent contamination of receiving waters of the United States. Discharge diversions are temporary or permanent structures installed to divert flow, store flow, or limit storm water runon and runoff.

These diversion practices have several objectives. First, diversion structures can be designed to prevent otherwise uncontaminated (or less contaminated) water from crossing disturbed areas or areas containing significant amounts of contaminated materials, where contact may occur between runon and significant materials. These source reduction measures may be particularly effective for inactive coal mine sites because they prevent runon of uncontaminated discharges from contacting exposed materials and/or reduce the flow across disturbed areas, thereby lessening the potential for erosion. Second, diversion structures can be used to collect or divert waters for later treatment, if necessary. The usefulness of these control measures are limited by such factors as the size of the area to be controlled and the type and nature of materials exposed and precipitation events.

Diversion dikes, curbs, and berms are temporary or permanent diversion structures that prevent runoff from passing beyond a certain point, and divert runoff away from its intended path. Dikes, curbs or berms may be used to surround and isolate areas of concern at ore mining and dressing sites, diverting flow around piles of overburden, waste rock, and storage areas, to minimize discharge contact with contaminated materials and to limit discharges of contaminated water from confined areas.

b. Drainage/storm water conveyance systems. Drainage or storm water conveyance systems can provide either a temporary or a permanent management practice which functions to channel water away from eroded or unstabilized areas, convey runoff without causing erosion, and/or carry discharges to more stabilized areas. The use of drainage systems as a permanent measure may be most appropriate in areas with extreme slopes, areas subject to high velocity runoff, and other areas where the establishment of substantial vegetation is infeasible or impractical. For instance, several BMPs described below may be useful storm water and erosion control methods applicable to haul roads and access roads.

- *Channels or Gutters*—Channels or gutters collect storm water runoff and direct its flow. Like diversion systems, channels or gutters may act to divert runoff away from a potential source of contamination, but may also be used to channel runoff to a collection and/or treatment area including settling ponds, basins or work-out pits.
- *Open Top Box Culverts, and Waterbars*—These structures are temporary or permanent structures that divert water from a roadway surface. Open top box culverts may be used on steeply graded, unpaved roads in place of pipe culverts to divert surface runoff and flow from inside ditches onto the downhill slope of a road. These structures are typically made of wood and should periodically be monitored and repaired if necessary.

Waterbars are berms built by a dozer, or by hand, to a one to two foot height. They serve to extend the entire width of the road, with a downslope angle between 30 and 40 percent. Waterbars are kept open at a discharge end to allow water to flow away from the road, and require little maintenance. These berms may be used as temporary or permanent structures.

- *Rolling Dips and Road Sloping*—Rolling dips and road sloping are permanent water diversion techniques installed using natural contours of the land during road construction. These BMPs prevent water accumulation on road surfaces and divert surface runoff toward road ditches, which then convey the storm water to ponds or other management areas.
- *Roadway Surface Water Deflector*—A roadway surface water deflector is another technique to prevent accumulation of water on road surfaces. The structure uses a conveyor belt sandwiched between two pieces of treated wood and placed within the road to deflect water. This is a useful technique for steeply graded, unpaved roads.
- *Culverts*—Culverts are permanent surface water diversion mechanisms used to convey water off of, or underneath a road. Made of corrugated metal, they must extend across the entire width of the road, and beyond the fill slope. Additional erosion control mechanisms may need to be installed at the discharge end of the culvert.

c. Runoff dispersion. Drainage systems are most effective when used in conjunction with runoff dispersion devices designed to slow the flow of water discharged from a site. These devices also aid storm water infiltration into the soil and flow attenuation. Some examples of velocity dissipation devices include check dams, rock outlet protection, level spreaders, and serrated and benched slopes.

- *Check Dams*—Check dams are small temporary dams constructed across swales or drainage ditches to reduce the velocity of runoff flows, thereby reducing erosion and failure of the swale or ditch. This slowing reduces erosion and gullying in the channel and allows sediments to settle.

Check dams may be installed in small temporary or permanent channels where vegetation of the channel lining is not feasible and where there is danger of erosion. These may be areas where installation of nonerosive liners are not cost effective.

Check dams diminish the need for more stringent erosion control practices in the drainage ditch since they decrease runoff velocity. When constructing check dams, the use of overburden or waste rock should be avoided where there is the potential for contamination.

- *Rock Outlet Protection*—Rock protection placed at the outlet end of culverts, channels, or ditches reduces the depth, velocity, and destructive energy of water such that the flow will not erode the downstream reach. The use of some materials (e.g., mine waste rock or ore) should be avoided where contamination may occur. As with check dams, rock outlet protection may also be used as a source reduction treatment mechanism by using rocks containing limestone or other alkaline materials to neutralize acidic discharges.
- *Level Spreaders*—Level spreaders are outlets for dikes and diversions consisting of an excavated depression constructed at zero grade across a slope. Level spreaders diffuse storm water point sources and release it onto areas stabilized by existing vegetation.
- *Serrated Slopes and Benched Slopes*—These runoff dispersion methods break up flow of runoff from a slope, decreasing its ability to erode. Serrated and benched slopes provide flat areas that allow water to infiltrate, and space for vegetation to grow and reinforce soils. Serrated slopes are equipped with small steps, from one to two feet of horizontal surface exposed on each step. Benched slopes have larger steps, with vertical cuts between two and four feet high.
- *Contouring*—Surface contouring is the establishment of a rough soil surface amenable to revegetation, through creating horizontal grooves,

depressions, or steps that run with the contour of the land. Slopes may also be left in a roughened condition to reduce discharge flow and promote infiltration. Surface roughening aids in the establishment of vegetative cover by reducing runoff velocity and giving seed an opportunity to take hold and grow. This technique is appropriate for all slopes steeper than 3:1 in order to facilitate stabilization of the slope and promote the growth of a vegetative cover. Once areas have been contoured, they should be seeded as quickly as possible.

• *Drain Fields*—Drain fields are used to prevent the accumulation of water and/or ground water at a site, by diverting infiltrating sources through gravity flow or pumping. Typically filled with porous, permeable materials such as graded rock, or perforated pipe, and lined with geotextile fabric, these mechanisms are useful underneath significant materials, reducing the amount of water that ultimately comes into contact with significant materials.

• *Stream Alteration*—Altering or channelizing the path of a stream to bypass all or some disturbed areas on a site, allows additional mining activities, and avoids contamination of stream water by disturbed lands. This practice is complicated, however, by the need to restore the channel when mining operations end.

• *Drop Structures*—Drop structures are large angular rocks placed in a V-shaped pattern to slow the velocity of storm water runoff. These structures are typically reinforced by logs or large rocks imbedded in the streambanks.

d. Sediment control and collection. Sediment control and collection limits movement and retains sediments from being transported offsite. Several structural collection devices have been developed to remove sediment from runoff before it leaves the site. Several methods of removing sediment from site runoff involve diversion mechanisms previously discussed, supplemented by a trapping or storage device. Structural practices typically involve filtering diffuse storm water flows through temporary structures such as straw bale dikes, silt fences, brush barriers or vegetated areas.

Structural practices are typically low in cost. However, structural practices require periodic removal of sediment to remain functional. As such, they may not be appropriate for permanent use at inactive mines. However, these practices may be effectively used as temporary measures along haul roads and access roads.

• *Plastic Matting, Plastic Netting, and Erosion Control Blankets*—These BMPs are used to protect bare soils to control dust and erosion. Mats and blankets help to promote vegetative growth by maintaining moisture and heat within the soil. Plastic matting and netting improve slope stabilization and may be used as a permanent treatment to encourage grass growth. Plastic netting is a more effective material to use while promoting growth of vegetation as it permits sunlight to penetrate through to the soils. Erosion control blankets also stabilize slopes, and control erosion. These blankets may be made of jute, or plastic netting, but are more expensive than straw.

• *Mulch-straw or Wood Chips*—Mulches and wood chips are useful temporary covers for bare or seeded soils, with an erosion control effectiveness rating of 75 to 98 percent.[81] Like matting, mulch-straw or wood chips help soils retain moisture and warmth to promote vegetative growth. Used on slopes and/or in combination with nylon netting, these materials may prevent erosion by wind and water. Over time, however, the mulch cover will decrease in effectiveness.

• *Compaction*—Soil compaction using a roller or other heavy equipment increases soil "strength" by increasing its density. More dense soil is less prone to erosion and long-term soil settlement. The surface of compacted soils should be roughed and seeded or vegetated to increase its durability.

• *Sediment/Settling Ponds*—Sediment ponds function as sediment traps by containing runoff for long periods of time, allowing suspended solids to settle. These structures can achieve a high removal rate of sediment for both process wastewater and storm water discharges. Sediment/settling ponds are easily constructed and require minimal maintenance. Their flexibility to treat both process wastewater and storm water makes the use of ponds a desirable treatment for discharges from ore mining and dressing facilities. Of course, site characteristics must be such that some or all discharges can be practically channeled to a centralized area for treatment. Where this is not practical, the cost of constructing multiple sediment ponds may become prohibitive. In addition, periodic dredging may be required in order to maintain the capacity of these ponds.

Discharge ponds may also be designed to act as surge ponds which are designed to contain storm surges and then completely drain in about 24 to 40 hours, and remain dry during times of no rainfall. They can provide pollutant removal efficiencies that are similar to those of detention ponds.[82] Storm surge ponds are typically designed to provide both water quality and water quantity (flood control) benefits.[83]

• *Gabions, Riprap, and Native Rock Retaining Walls*—These BMPs are all forms of slope stabilization. Gabions consist of rocks (riprap) contained by rectangular wire boxes or baskets for use as permanent erosion control structures. Riprap consists of loose rocks placed along embankments to prevent erosion. Native rock retaining walls are another form of slope stabilization, with walls up to five feet in height, constructed from native rock to reinforce a steep slope.

• *Biotechnical Stabilization*—Biotechnical stabilization uses live brush imbedded in the soils of a steep slope to prevent erosion. This method relies on the premise that the imbedded vegetation will eventually root and help stabilize the slope.

• *Straw Bale Barrier*—Straw bales may be used as temporary berms, barriers, or diversions, capturing sediments and filtering runoff. When installed and maintained properly, these barriers remove approximately 67 percent of the sediment load.[84] These barriers are applicable across small swales, in ditches, and at the toe of bare slopes where there is a temporary, large volume of sediment laden runoff.

• *Sediment Traps or Catch Basins*—These temporary or permanent structures are useful for catching and storing sediment laden storm water runoff and are particularly useful during construction activities to contain runoff. The effectiveness of these BMPs is better in smaller drainage basin areas. Sediment traps are less than 50 percent effective in removing sediment from storm water runoff.[85]

• *Vegetated Buffer Strips*—The installation of vegetated buffer strips will reduce runoff and prevent erosion at a removal efficiency rate of 75 to 99 percent depending upon the ground cover.[86] In addition, vegetated buffer strips catch and settle sediment

[81] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990.

[82] "Urban Targeting and BMP Selection," EPA, Region V, November 1990.

[83] "Urban Surface Water Management," Walesh, S.G., Wiley, 1989.

[84] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–74.

[85] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–26.

[86] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–7.

contained in the storm water runoff prior to reaching receiving waters.

• *Silt Fence/Filter Fence*—A low fence made of filter fabric, wire and steel posts, should be used on small ephemeral drainage areas where storm water collects or leaves a mine site. Silt fences remove 97 percent of the sediment load and are easier to maintain and remove without creating lasting impacts to the environment.[87] Silt and filter fences need to be inspected periodically, and may not be as effective as straw bales, since fabric may become clogged with fine particles preventing water flow.

Silt fences may have limited applicability for large areas: they are most effective for use in small drainage areas. These fences may also be used in conjunction with nonstructural practices to maintain the integrity of soil prior to the establishment of vegetation.

• *Siltation Berms*—Siltation berms are typically placed on the downslope side of a disturbed area to act as an impermeable barrier for the capture and retention of sediments in surface water runoff. Plastic sheeting is typically used to cover the berm. The berm and the plastic sheeting may require periodic maintenance and repair.

• *Brush Sediment Barriers*—Brush barriers are temporary sediment barriers composed of tree limbs, weeds, vines, root mat, soil, rock and other cleared materials placed at the toe of a slope. A brush barrier is effective only for small drainage areas, usually less than ¼ acre, where the slope is minimal.

Brush barriers do not function as permanent barriers since over time the barrier itself will degrade. This BMP is most effective when located at the toe of a slope of an area in which vegetation is being grown or during temporary operations. The brush barriers remove any excessive sediment which is generated by erosion prior to the establishment of vegetation.

e. Vegetation practices. Vegetation practices involve establishing a sustainable ground cover by permanent seeding, mulching, sodding, and other such practices. A vegetative cover reduces the potential for erosion of a site by: absorbing the kinetic energy of raindrops which would otherwise impact soil; intercepting water so it can infiltrate into the ground instead of running off and carrying contaminated discharges; and by slowing the velocity of runoff to promote onsite deposition of sediment. Vegetative controls are often the most important measures taken to prevent offsite sediment movement, and can provide a six-fold reduction in the discharge of suspended sediment levels.[88] Permanent seeding has been found to be 99 percent effective in controlling erosion for disturbed land areas.[89]

Typically, the costs of vegetative controls are low relative to other discharge mitigation practices. Given the limited capacity to accept large volumes of runoff, and potential erosion problems associated with large concentrated flows, vegetative controls should typically be used in combination with other management practices. These measures have been documented as particularly appropriate for mining sites.

• *Topsoiling, Seedbed Preparation*—The addition of a layer of topsoil or plant growth material provides an improved soil medium for plant growth. Seedbed preparation may include the addition of topsoil ingredients to be mixed in with soils used for seedbed preparation. Ripping, dicing, and mixing soils promotes weed control and aerates the soil, encouraging seedling growth.

• *Broadcast Seeding and Drill Seeding*—Seeding and vegetative planting are methods used to revegetate an area. Broadcast seeding spreads seeds uniformly, by hand or machine, to steep sloped or rocky areas, flat surfaces, and areas with limited access. Drill seeding is performed using a rangeland drill seeder and may not be used on rocky surfaces. Drill seeding is more suitably performed on flat, nonrocky surfaces, where the machine can insert seeds into the soil.

• *Willow Cutting Establishment*—Willow cutting establishment describes a method of soil stabilization useful for stream banks and other areas located adjacent to water. Similar to biotechnical stabilization, willow cuttings are used to promote growth in an area needing stabilization. Willow cuttings are typically used to reinforce a streambank or other moist area. Willow cuttings require a great deal of moisture and must be planted in areas that remain moist for long periods in order to take hold and grow.

f. Capping. In some cases, the elimination of a pollution source through capping contaminant sources may be the most cost effective control measure for some discharges from inactive coal mines. Depending on the type of management practices chosen the cost to eliminate the pollutant source may be very high. Once completed, however, maintenance costs will range from low to nonexistent.

Capping or sealing of waste materials is designed to prevent infiltration, as well as to limit contact between discharges and potential sources of contamination. Ultimately, capping should reduce or eliminate the contaminants in discharges. In addition, by reducing infiltration, the potential for seepage and leachate generation may also be lessened.

The use of this practice depends on the level of control desired, the materials available, and cost considerations. Many common liners may be effective including common soil, clay, and/or synthetic liners. Generally, soil liners will provide appreciable control for the lowest cost. Synthetic or clay liners may be appropriate to cover materials known to have a significant potential to impact water quality.

EPA has identified a wide variety of best management practices (BMPs) that may be used to mitigate discharges of contaminants at coal mines. Many of the practices focus on sediment and erosion control and are similar to BMPs used in the construction industry. For more details on the use and implementation of these practices the reader is encouraged to obtain a copy of one or more of the many good sediment and erosion control books available on the market.[90] In some cases (e.g., low pH and/or high metals concentrations), BMPs, and sediment and erosion controls may not be adequate to produce an acceptable quality of storm water discharge. Under those circumstances additional physical or chemical treatment systems may be necessary to protect the receiving waters.

g. Treatment. Treatment practices are those methods of control which are normally used to reduce the concentration of pollutants in water before it is discharged. This is in contrast to many BMPs where the emphasis is on keeping the water from becoming contaminated. Treatment practices may be required where flows are currently being affected by exposed materials and where other BMPs are insufficient to meet discharge goals. These practices are usually the most

[87] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–75.

[88] "Performance of Current Sediment Control Measures at Maryland Construction Sites," January 1990, Metropolitan Washington Council of Governments, page X.

[89] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–4.

[90] "Best Management Practices for Mining in Idaho," Idaho Department of State Lands, November 1992; "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September 1992, (EPA 832–R–92–005); and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

resource intensive as they often entail significant construction costs and require monitoring and maintenance on a frequent and regular basis. Treatment options may range from high maintenance controls to low maintenance. High maintenance treatment techniques require periodic manpower to operate and maintain the BMP. Low maintenance cost techniques have initial capital costs but operate with little long-term maintenance after they are implemented. At a few sites, treatment measures other than high maintenance measures may be appropriate to address specific pollutants.

• *Chemical/Physical Treatment*—An example of a high maintenance technology that is found at coal mining facilities is chemical/physical treatment. The most common type of chemical/physical treatment involves the addition of limestone to lessen the acidity of the discharge and/or precipitate metals. Metals may be removed from wastewater by raising the pH of the wastewater to precipitate them out as hydroxides. Typically, the pH of the wastewater must be raised to 9 to 12 standard units in order to achieve the desired precipitation of metals. After metals precipitation, the addition of some form of acid or carbon dioxide may be required to reduce the pH to acceptable levels. Polymer addition may be required to enhance the settling characteristics of the metal hydroxide precipitate. In general, this practice requires significant operator participation to ensure proper neutralization and/or precipitation and thus may not be cost effective for most storm water discharges.

• *Artificial Wetlands*—This type of BMP system is gaining popularity as a method of treating process wastewater from inactive coal mines. They can be an effective system for improving water quality either alone or in conjunction with other treatment practices. The complex hydrologic, biological, physical, and chemical interactions that take place within a wetland result in a natural reduction and cleansing of influent pollutants. Wetland processes are able to filter sediments, and absorb and retain chemical and heavy metal pollutants through biological degradation, transformation, and plant uptake.

Artificial wetlands are designed to maintain a permanent pool of water. Properly installed and maintained retention structures (also known as wet ponds) and artificial wetlands will be most cost-effective when used to control runoff from larger, intensively developed sites. These artificial wetlands are created to provide treatment but also provide a wildlife habitat, and enhance recreation and landscape amenities. Artificial wetlands are being intensely researched by the Bureau of Mines as a means of mitigating acid mine drainage.

Natural wetlands should not be considered as part of the treatment system because they are considered to be waters of the United States. The necessary controls, or BMPs, must be provided prior to discharging the storm water runoff to natural wetlands or other receiving waters.

In summary, a wide variety of BMPs are available for inactive coal mines and for use along haul roads and access roads at active coal mines. These measures range from simple low cost, low maintenance source reduction practices such as diversion structures to high cost, maintenance intensive practices such as wetlands treatment. Clearly, the selection of a practice or group of practices will be site-specific depending on conditions and potential impacts as well as the resources available at each site. A specific best available technology (or technologies) cannot be determined because of the differences between sites and the quantities and characteristics of their discharges.

4. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. Under the description of potential pollutant sources section, all coal mining and related facilities are required to describe all potential pollutant sources and provide the locations of these sources. A site map, such as a drainage map required for SMCRA permits, must indicate drainage areas and storm water outfalls from the potential pollutant sources as indicated in item 1 above. The map should provide, but not be limited to, the following information:

• Drainage direction and discharge points from all applicable mining-related areas, including culvert and sump discharges from roads and rail beds and also from equipment and vehicle maintenance areas, lubricants and other potentially harmful liquids

• Location of each existing erosion and sedimentation control structure and other control measures for reducing pollutants in storm water runoff

• Receiving streams or other surface water bodies

• Locations exposed to precipitation which contain acidic or metal ladened spoil, refuse, or unreclaimed disturbed

• Locations where major spills or leaks of toxic or hazardous pollutants have occurred

• Locations where liquid storage tanks containing potential pollutants, such as caustics, hydraulic fluids and lubricants, are exposed to precipitation

• Locations where fueling stations, vehicle and equipment maintenance areas are exposed to precipitation

Under the measures and controls section, operators of the inactive and active coal mines are required to describe storm water management controls for coal mining-related facilities, including the following:

(1) Compliance with SMCRA requirements. The Surface Mining Control and Reclamation Act (SMCRA) regulations require sediment and erosion control measures and practices for haul roads and most of the other active mining-related areas covered by this section. All such SMCRA requirements are also requirements of the pollution prevention plan and other applicable conditions of this section.

(2) Good housekeeping practices. The purpose of good housekeeping practices is to remove or lessen the potential pollution sources before they come into contact with storm water. This includes collection and removal of waste oils collected in traps; cleaning up exposed maintenance areas of spilled lubricants and fuels, and similar measures; and preventing the offsite movement of dust by sweeping or by road watering.

(3) Preventive maintenance. A timely maintenance program should include: inspections for preventing breakdowns, corrosion of tanks and deterioration of pressure fuel or slurry pressure lines; periodic removal and disposal of accumulated solids in sediment traps; and replacement of straw bales and other control measures subject to weathering and deterioration.

(4) Inspections. For all SMCRA regulated active mining-related sites, which include most of the active facilities under this section, SMCRA authorities are required to conduct regular inspections. Coordinated inspections by the facility representative would be expected to take place either before, during or after the complete SMCRA inspections. Therefore, inspections by the facility representative would not be placing an undue burden on the facility. In addition, sediment and erosion control measures should be evaluated at least once yearly during a storm period of at least 0.1 inch rainfall where effectiveness can be evaluated first hand. Observations should also be made at this time of resulting impact of any settled solids in the receiving stream.

Inactive coal mines should be inspected at least once yearly, except where very remote, to maintain an appraisal of sediment and erosion control measures, determine outstanding problem areas, and plan for improved measures.

(5) Prohibition of non-storm water discharges. Many inactive mines and portions of inactive mines are abandoned underground mines which have seeps or other discharges which are not in response to storm events. These type discharges from inactive mines are not covered by this section. In addition, floor drains from maintenance buildings and other similar drains in mining and preparation plant areas may contain contaminants and are prohibited from inclusion in this section.

(6) Sediment, erosion and flow management controls. The plan must describe all sediment, erosion, and flow management controls used to control storm water discharges. The plan should also address the reasonableness and appropriateness of each sediment, erosion, and flow management control, and identified when they are required by State or Federal SMCRA regulations. For the most part, these measures are best management practices expected of construction and other activities which are subject to storm runoff. However, construction activities are usually much more short term that mining activities, so greater emphasis must be placed on implementing long-term measures for haul roads and other mining-related facilities.

Under the comprehensive site compliance evaluation the inspection requirements outlined in the plan must be implemented and, where erosion control and pollution prevention measures described in the plan are found deficient, the plan must be revised to include reasonable and appropriate control measures. Reports including observations and incidences of noncompliance should be prepared and kept on file for possible review.

5. Numeric Effluent Limitation

Based on the lack of sampling data, it is infeasible for EPA to calculate effluent limitations at this time. The main pollutant concern is excess solids runoff and discharge, but there are no widely accepted solids limits which could be expected from the recommended sediment and erosion control measures. The 0.5 ml/L settleable solids limit, as required by 40 CFR part 434 for storm discharges from surface mine settling ponds, can be considered a goal but not a requirement for control measures, which for the most part, consist of sediment ditches, straw bales and similar structures normally used for haul roads. The permit does not cover facilities that are in violation of water quality standards and where water quality-based effluent limits should apply.

6. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels because of the industrial activities and materials exposed to precipitation, does not support sampling at coal mining and coal mining-related facilities. Based on a consideration of the BMPs typically used at these facilities and of the generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure that storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

b. Quarterly visual examination of storm water quality. Quarterly visual inspections of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for coal mining and coal mining-related facilities. EPA believes that between quarterly visual inspections and site compliance evaluations, potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.6.a. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with haul roads for active mines, preparation plants, and refuse disposal sites must monitor storm water discharges from those haul roads during rainfall periods at least annually except as provided in VI.E.7. (Sampling Waiver), and VI.E.6. (Representative Discharge). Permittees are required to obtain samples from at least 10 percent of the haul road discharge outlets. The samples must be representative of all haul road discharges to the extent possible. For sites with less than 10 haul road discharge outlets, at least one outlet must be sampled. Permittees shall provide identification of the outlets sampled; the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; an estimate of the total volume (in gallons) of the discharge sampled; and a description of any visual impact on the receiving stream.

b. Sample type. The samples shall be grab samples and analyzed for settleable solids. The samples shall be collected from discharges resulting from storm events greater than 0.1 inches in magnitude and occurring at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm events. The grab samples shall be taken during the first hour of the discharge if possible.

c. Reporting. Permittees are not required to submit monitoring results, unless required in writing by the Director. However, such permittees must retain monitoring results in accordance with Part VI.E. (Retention of Records).

8. Cost Estimates

Costs for sediment and erosion control measures for inactive mines and other facilities not covered by SMCRA regulations would be similar to costs for storm water management of the construction industry. These costs are described in Tables 1 and 2 of the Federal Register of September 9, 1992, "Final NPDES General Permits For Storm Water Discharges from Construction Sites; Fact Sheet."

Best management practices, including sediment and erosion control measures, required by the pollution prevention plan for active mining-related areas are mostly conventional practices required by State and Federal SMCRA regulations. No significant additional expenses for implementing these measures are likely necessary. Where such additional measures are required, the costs would be similar to those described in the September 9, 1992, baseline general permit for construction activities.

I. Storm Water Discharges Associated With Industrial Activity From Oil and Gas Extraction Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with an industrial activity." This definition includes point source discharges of storm water from eleven major categories of facilities, including: "* * * (iii) facilities classified as Standard Industrial Classification (SIC) 10 through 14 (mineral industry) including * * * oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products, or waste products located on the site of such operations."

As stated above and at 40 CFR 122.26(b)(14)(iii), only those oil and gas facilities that discharge "contaminated" storm water are required to submit permit applications under the November 16, 1990, storm water rule. For oil and gas facilities, contamination means that there has been a release of a Reportable Quantity (RQ) of oil or hazardous substances in storm water since November 16, 1987 (hereinafter referred to as "an RQ release"). Only those facilities that have had an RQ release are required to submit a storm water permit application.

This section of today's proposed permit only covers storm water discharges associated with industrial activities from oil and gas exploration, production, processing, or treatment operations, or transmission facilities. Hereinafter, the facilities listed above will be referred to as "oil and gas facilities." Oil and gas facilities eligible to seek coverage under this section include the following types of operations:

- Crude Petroleum and Natural Gas (SIC Code 1311).
- Natural Gas Liquids (SIC Code 1321).
- Drilling Oil and Gas Wells (SIC Code 1381).
- Oil and Gas Field Exploration Services (SIC Code 1382).
- Oil and Gas Field Services, Not Elsewhere Classified (SIC Code 1389).

These industries include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply and repair industries. Many of the oil field service facilities may also manufacture oil field equipment. Discharges associated with these manufacturing activities shall be covered by this section if the primary activity of the facility is grouped under Major SIC Group 13.

Pursuant to Section 311 of the Clean Water Act and Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), RQs were established for oil and hazardous substances. As defined at 40 CFR part 110, an RQ is "the amount of oil that violates applicable water quality standards or causes a film or sheen upon or a discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines." The RQs for other substances are listed in 40 CFR 117.3 and 302.4 in terms of pounds released over any 24-hour period.

Discharges covered by this section include all storm water discharges from facilities which have had an RQ release where precipitation and storm water runon come into contact with significant materials including, but not limited to, drilling and production equipment and other machinery, raw materials, waste products, by-products, finished products, stored materials, and fuels. This includes storm water discharges from access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for

industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

Oil and gas exploration and production includes all activities related to the search for, and extraction of, liquid and gas petroleum from beneath the Earth's surface. Found almost exclusively in sedimentary rocks, oil and natural gas accumulate in geologic confinements called traps which, by virtue of an impermeable overlying layer, have stopped the migration of the fluid. The volume of petroleum contained in a trap can vary from negligible to billions of barrels.

Though at one time such traps may have been close enough to the surface to allow easy detection (i.e., surface seepage), modern exploration relies on sophisticated geophysical testing techniques to locate potentially producible formations. Gravitational and seismic surveys of subsurface geology provide indirect indications of the likelihood of finding promising geological formations. This process is complicated by the fact that, at least in the U.S., the average depth at which one may reasonably expect to find oil is increasing since many of the largest shallow formations are assumed to have been found already.

Drilling operations require construction of access roads, drill pads, mud pits, and possibly work camps or temporary trailers. Drill pads are areas used to stage the drilling operation and generally range from 2 to 5 acres. The pad accommodates the drilling rig and associated operations including pumps, reserve pits, and mud tanks.

Modern well drilling involves the use of a rotary drill to bore through soil and rock to the desired well depth. The drill bit is constantly washed with a circulating drilling fluid, or "mud," which serves to cool and lubricate the bit and remove the cuttings to the surface. The drilling mud also serves to prevent "blowouts" from overpressured water and gas bearing formations. If the drill reaches the desired depth and fails to locate a producible deposit of oil or gas, the well must be plugged and the site abandoned. Even if oil and/or gas is found the well may not be producible. If the formation fails to exhibit the right combination of expected volume, porosity, and permeability, the costs of extraction would be prohibitive.

After a well has been drilled, it is "completed" if well logging data indicate that the well is capable of producing commercial quantities of oil or gas. Completion includes a number of operations that may be necessary to allow the well to produce oil or gas. These include installing and cementing casing, installing the production tubing and downhole equipment, repairing damage that drilling may have caused to the formation, and possibly stimulating the well. During a well's active life, periodic "workovers" are necessary. Workovers can include a number of procedures intended to maintain or enhance production. These can include repairing or replacing downhole equipment, removing accumulated scale or paraffin from tubing or casing, and stimulating the formation to restore or enhance production. Wells are stimulated, whether by treating with acid or fracturing, during completion or workover or both: it is common for wells to be stimulated at completion and then periodically throughout their lives.

Acid stimulation involves introducing an acid solution to the formation. The acid dissolves the rock, thus creating or enlarging flow path openings. Acids are also used to repair damage to formations caused by drilling or other operations. In addition, they may be used for scale removal and other purposes. Fracturing by hydraulic pressure is achieved by pumping fluids at high pressure (i.e., at high rates) into the well, thereby causing material failure of the rock in the formation of interest (i.e., fractures). Fracturing is also done using explosive devices to fire projectiles into the formation of interest. The fractures induced in the formations serve as flow paths for hydrocarbons.

In instances where the reservoir is sufficiently large, "delineation" wells are drilled to determine the boundary of the reservoir and additional "development" wells are drilled to increase the rate of production from the "field." Because few new wells in the U.S. have sufficient energy (pressure) to force oil all the way to the surface, surface or submersible pumps are placed at the wells and production begins.

This first phase of production, primary production, may continue for several to many years, requiring only routine maintenance to the wells as they channel oil to the surface for delivery to refineries. However, as the oil is removed from the formation the formation pressure decreases until the wells will no longer produce. Because 70 percent of the total recoverable oil may remain in the formation, additional energy may be supplied by the controlled injection of water from the surface into the formation. The injected water acts to push the oil toward the well bores. Such secondary recovery or "water flooding" projects may employ hundreds of injection wells throughout a field to extend the life of the wells. Much of the water used for injection is pumped along with oil from the producing well, separated from the oil, and then reinjected.

Produced fluid, as pumped from a well, is sent through one or more process units to separate the waste fractions (e.g., produced water, emulsions, scale, and produced sand) from the salable hydrocarbon.

As oil and gas are recovered from wells, they are collected or gathered in pipelines for transport to produced fluid treatment facilities. These facilities separate marketable gas and crude oil from water and sand.

Often, service companies are hired by the oil company to perform many of the activities described above. Typically these contractors drill the wells and perform other specific tasks such as installing casing, conducting formation tests, and managing wastes, etc. When a well or field ceases to produce oil or gas at an economically feasible rate, the field must be abandoned and reclaimed.

2. Pollutants in Storm Water Discharges Associated with Oil and Gas Facilities

Exploration and production techniques will vary depending on the type and characteristics of formations, pollutants present, and waste management controls. Therefore, impacts associated with storm water discharges from oil and gas facilities will vary. Several other factors influence to what extent significant materials from these types of facilities and processing operations can affect water quality. Such factors include: hydrology/geology; the types of chemical additives and lubricating fluids used; the procedure for waste management; the nature and size of the RQ release; the amount of contamination remaining after the RQ release; the size of the operation; and type, duration, and intensity of precipitation events. These and other factors will interact to influence the quantity and quality of storm water runoff. In addition, sources

of pollutants other than storm water, such as illicit connections,[91] spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Based on information submitted with the group applications and other documents, EPA has identified some storm water pollutants and sources typically associated with oil and gas facilities in table I–1. Due to distinct industrial activities and materials used at facilities, however, sources and associated pollutants will vary from site to site. The pollutants listed in table I–1 are not meant to be a comprehensive listing of all potential storm water pollutants at oil and gas facilities.

TABLE I–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS

Activity	Pollutant source	Pollutant
Construction of: —Access Roads —Drill Pads —Reserve Pits —Personnel Quarters —Surface Impoundments	Soil/dirt, leaking equipment and vehicles	TSS, TDS, oil and grease.
Well Drilling	Drilling fluid,[1] lubricants, mud, cuttings, produced water.	TSS, TDS, oil and grease, COD, chlorides, barium, naphthalene, phenanthrene, benzene, lead, arsenic, fluoride.
Well Completion/Stimulation	Fluids (used to control pressure in well), cement, residual oil, acids, surfactants, solvents, produced water, sand.	TSS, TDS, oil and grease, COD, pH, acetone, toluene, ethanol xylenes.
Production	Produced water, oil, waste sludge, tank bottoms, acids, oily debris, emulsions.	Chlorides, TDS, oil and grease, TSS, pH, benzene, phenanthrene, barium, arsenic, lead, antimony.
Equipment Cleaning and Repairing	Cleaning solvents, lubricants, chemical additives.	TSS, TDS, oil and grease, pH.
Site Closures	Residual muds, oily debris	TSS, TDS, oil and grease.

[1] The potential contaminants to be found in drilling fluid varies from site to site, depending on the components of the fluid and any pollutants added due to use of the fluid. Storm water discharges that come into contact with used drilling fluids may include the following pollutants, among others: toluene, ethyl benzene, phenol, benzene, and phenanthrene. Used drilling fluids may also contain inorganic pollutants from additives or downhole exposure, such as arsenic, chromium, lead, aluminum, sulfur, and various sulfates.

Table I–2 indicates the sampling data results for part 2 data submitted to EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. As Table I–2 indicates, large variations in the minimum and maximum values were often found for each of the eight conventional pollutants monitored. For example:

- Composite samples of TSS ranged from 1 mg/L to 4186 mg/L.
- Grab samples of COD ranged from 14 mg/L to 1050 mg/L.
- Oil and grease values ranged from 3 mg/L to 189 mg/L.

TABLE I–2.—STATISTICAL ANALYSIS OF OIL AND GAS FACILITIES SAMPLING DATA

[mg/L unless otherwise noted]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	55	33	13.7	10.6	0.0	0.0	116.0	90.0	9.7	7.0	44.0	21.8	116.0	90.0
COD	36	31	140.12	115.9	14.0	0.0	1050.0	450.00	82.0	92	352.00	445.0	1050.0	450.0
Nitrate + Nitrite Nitrogen	35	31	0.52	0.60	0.00	0.00	5.50	9.90	0.15	0.12	4.10	3.30	5.50	9.90
Total Kjeldahl Nitrogen	36	30	1.39	1.69	0.00	0.00	9.00	14.50	0.76	0.925	5.20	5.67	9.00	14.50
Oil & Grease	36	N/A	10.16	N/A	0.00	N/A	189.00	N/A	3.0	N/A	49.00	N/A	189.00	N/A
pH (s.u.)	35	N/A	N/A	N/A	5.88	N/A	11.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	36	33	15.82	5.41	0.00	0.00	149.72	50.74	0.18	0.07	144.90	12.48	146.72	50.74
Total Suspended Solids	57	30	353	413	3	1	1657	4186	75	46	1530	2056	1657	4186

The pollutants most commonly found in storm water discharges from onshore oil and gas facilities and their service industries are the following conventional pollutants: BOD_5, COD, oil and grease, phosphorus and suspended solids. Of these conventional pollutants, COD, oil and grease, and phosphorus were present in concentrations that potentially may affect water quality during high flow situations. COD levels are high in all categories of oil and gas facilities. Phosphorus levels were particularly high at those facilities where washing of oil field equipment and trucks is a major activity.

Sources of pollutants of concern and the effects on water bodies from these pollutants are summarized as follows:

(1) *Total suspended solids (TSS).* Potential sources of TSS in storm water discharges from oil and gas facilities include, among others, drill cuttings, drilling muds and fluids, backfill material, earthen material disturbed during construction, produced water, and tank bottoms. The inorganic components of TSS may include sand, silt, and clay, as well as drilling fluid

[91] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining and processing facilities is low yet it still may be applicable at some operations.

components including arsenic, chromium, lead, aluminum, sulfur, and various sulfates. Organic compounds, such as naphthalene, toluene, ethyl benzene, phenol, benzene, and phenanthrene, may also result from components in the drilling fluid.

Because suspended solids increase the turbidity of water, less light is able to penetrate the water, reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish.

(2) Chemical oxygen demand (COD). COD measures the total amount of oxygen necessary to oxidize compounds in water. At oil and gas facilities, significant levels of COD in the storm water discharges may result from contact with produced water, drilling fluids, lubricants and petroleum products.

(3) pH. The hydrogen ion concentration in an aqueous solution is represented by pH, which is defined as the negative logarithm of the hydrogen ion concentration in a solution. On the pH scale ranging from 0 to 14, a value of 7 represents neutral conditions in which the concentrations of hydrogen and hydroxyl ions are equal. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions.

Certain wastes such as produced water and acids used in the well workover process, may affect pH levels in storm water discharges. Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change.

(4) Oil and grease. Water impacted by oil and grease from onsite machinery and materials may exhibit an oxygen demand. Oil and grease emulsions are also detrimental to aquatic organisms and inhabitants because: (1) Deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

Potential sources of oil and grease from oil and gas facilities include spills of oils and lubricants, as well as petroleum components in drill cuttings, produced water, and drilling fluids.

In addition to the conventional pollutants, sampling data for barium and the organic solvent naphthalene were submitted by the permittees. These pollutants appear to be of concern at oil servicing facilities where well servicing equipment is washed and repaired. The pollution prevention plan to be developed by an oil and gas facility must consider methods of reducing the potential exposure of these activities to storm water.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology (BCT)]. The Agency does not believe it is necessary to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from oil and gas facilities to meet the BAT/BCT standards of the Clean Water Act. Rather than setting limits, this section establishes requirements for the development and implementation of a site-specific storm water pollution prevention plan consisting of a set of BMPs that are sufficiently flexible to address different sources of pollutants at different sites.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with facilities in this category.

Two types of BMPs which may be implemented to prevent, reduce or eliminate pollutants in storm water discharges are those which minimize exposure (e.g., covering, curbing, or diking) and treatment type BMPs which are used to reduce or remove pollutants in storm water discharges (e.g., oil/water separators, sediment basins, or detention ponds). EPA believes exposure minimization is an effective practice for reducing pollutants in storm water discharges from oil and gas facilities. Exposure minimization practices lessen the potential for storm water to come in contact with pollutants. These methods are often uncomplicated and inexpensive. They can be easy to implement and require little or no maintenance. EPA also believes that in some instances more resource intensive treatment type BMPs are appropriate to reduce pollutants such as suspended solids and oil/grease in storm water discharges associated with oil and gas facilities. Though these BMPs are somewhat more resource intensive, they can be effective in reducing pollutant loads and may be necessary depending on the type of discharge, types and concentrations of contaminants, and volume of flow.

The types of BMPs used may depend upon the methods of waste management utilized at a facility. Waste management and disposal practices at oil and gas facilities may vary significantly. For example, techniques for disposal of produced water and associated wastes include the following:

- Landfarming/spreading: Spreading wastes on land surfaces to stimulate biological degradation.
- Backfilling: Wastes are stored in a pit and then covered with dirt or other materials.
- Evaporation: In more arid parts of the country, liquid wastes are left exposed and eventually evaporate or percolate into the ground.
- Discharged: Wastes, sometimes treated, are discharged to waters of the U.S. NPDES permits are required for such discharges in some parts of the U.S.
- Injection: Wastes are injected back into the ground for disposal.
- Offsite disposal: Wastes are taken offsite to a commercial facility for disposal.

The pollutants of concern and the BMPs employed at an oil and gas facility depend upon which, if any, of the disposal techniques listed above are utilized. Where wastes are used for onsite road application, for example, all pollutant constituents of that waste need to be considered a potential contributor to contaminated storm water

discharges. In addition, the areas at the facility where road application occurs must also be considered when BMPs are being implemented. In contrast, if all waste is taken to an offsite disposal facility, the waste will most likely not affect the storm water discharges and the areas of concern will not be expanded.

Table I–3 lists some BMPs which may be effective in limiting the amount of pollutants in storm water discharges from oil and gas facilities. The BMPs listed are not necessarily required to be implemented. Rather, BMPs should be chosen based on the specific nature of the storm water discharges at each oil and gas facility and implemented as appropriate. Some of these BMPs involve reducing the amount of waste produced and stored onsite which can potentially contaminate storm water. Based on part 1 information, several of the BMPs suggested are already in place at many of the facilities. Part 1 submittals indicate that diking or other types of diversion occur at approximately 57 percent of the sampling facilities. Thirty percent of the sampling facilities noted that they use some form of covering as a BMP, and catch basins are in place at 12 percent of the sampling facilities. In addition, 11 percent of the facilities designated as samplers in part 1 information reported they had a Spill Prevention Control and Countermeasure Plan in place, and 16 percent had a material management plan.

TABLE I–3.—SUGGESTED BMPS FOR OIL AND GAS FACILITIES

Suggested BMPs
• Utilize diking and other forms of containment and diversion around storage tanks, drums of oil, acid, production chemicals, and liquids, reserve pits, and impoundments.
• Use diking and other forms of containment and diversion around material handling and processing areas.
• Use porous pads under drum and tank storage areas.
• Use covers and/or lining for waste reserve and sludge pits to avoid overflows and leaks.
• Use drip pans, catch basins, or liners during handling of materials such as tank bottoms.
• Reinject or treat produced water instead of discharging it.
• Limit the amount of land disturbed during construction of access roads and facilities.
• Employ spill plans for pipelines, tanks, drums, etc.
• Recycle oily wastes, drilling fluids and other materials onsite, or dispose of properly.
• Take wastes offsite to be disposed of instead of burying them.
• Use oil water separators.

4. Special Conditions

There are no additional requirements beyond those listed in Part VI.B. of this fact sheet.

5. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan—(1) Description of potential pollutant sources. Facilities under this section cover a broad range of oil field activities and service industries.

Drilling sites have large disturbed areas which will contribute additional sediments and suspended solids to the storm water runoff. Well drilling includes the use of many hazardous chemicals and materials. These include drilling muds, well casing cement, fractionating gels, and well treatments. The storage, mixing, and handling of these materials are potential pollutant sources.

Oil field service industries provide a variety of services for exploration and production activities. These service industries often store and mix chemicals for drilling muds, well casing cement, fractionating gels, and well treatments at the facility. The storage and mixing areas are potential pollutant sources. Often, mixing areas and equipment are exposed to storm water. Many oil field service facilities manufacture some oil field equipment components. The exposed raw materials, intermediate products, finished products, and waste products are potential sources of pollutants in storm water.

In its description of potential pollutant sources, a facility must include information about the RQ release which triggered the permit application requirements. Such information must include: the nature of the release (e.g., spill of oil from a drum storage area); the amount of oil or hazardous substance released; amount of substance recovered; date of the release; cause of the release (e.g., poor handling techniques as well as lack of containment in area); area affected by release, including land and waters; procedure to cleanup release; and remaining potential contamination of storm water from release.

(2) *Measures and Controls.*

(a) *RQ releases*—The permittee must describe the measures taken to clean up RQ releases or related spills of materials, as well as measures proposed to avoid future releases of Rqs. Such measures may include, among others: improved handling or storage techniques; containment around handling areas of liquid materials; and use of improved spill cleanup materials and techniques.

(b) *Vehicle and equipment storage areas*—Vehicles and equipment associated with oil field activity are often coated with oil, oil field drilling muds, and the chemicals associated with drilling. These vehicles and equipment are a significant source of pollutants. The permittee must address these areas, and institute practices to minimize pollutant runoff from this area.

(c) *Vehicle and equipment cleaning and maintenance areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The facility may consider performing all cleaning operations indoors, covering the cleaning operation, and/or collecting the storm water runoff from the cleaning area and providing treatment or recycling. These cleaning and maintenance activities can result in the exposure of cleaning solvents, detergents, oil and grease and other chemicals to storm water runoff. The use of drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling may reduce the pollutants discharged in storm water runoff.

(d) *Materials storage areas*—Storage units of all chemicals and materials (e.g., fuels, oils, used filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids, detergents drilling mud components, acids, organic additives) may result in the contamination of storm water discharges. Labeling of all storage containers helps facility personnel to respond effectively to spills or leaks. Additionally, covered storage of the materials and/or installation of berming and diking at the area can also be effective BMPs.

(e) *Chemical mixing areas*—Chemical mixing (e.g., the mixing of drilling muds, fractionating gels, mixing well casing cement, and well treatment acids and solvents) at both well sites and at

facilities with service drilling activities have significant potential to contaminate storm water runoff. The facility should consider covering the mixing area, using spill and overflow protection, minimizing runon of storm water to the mixing area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling. The facility should consider installation of berming and diking of the area. The waste water pollutants associated with produced waters, drilling muds, drill cuttings and produced sand from any source associated with onshore oil and gas production, field exploration, drilling, well completion, or well treatment are prohibited from being discharged (40 CFR 435.32).

(*f*) *Preventive maintenance*—The preventive maintenance program must include the inspection of all onsite and offsite mixing tanks and equipment, and inspection of all vehicles which carry supplies and chemicals to oil field activities. These mixing tanks and vehicles carry large volumes of fractionating chemicals and gels, cements, drilling muds, and well treatment chemicals and acids that potentially may contaminate waters of the United States if leaks or spills occur.

(*g*) *Inspection frequency*—All equipment and areas addressed in the pollution prevention plan shall be inspected semiannually. Equipment and vehicles which store, mix or transport hazardous materials will be inspected quarterly. Inspections shall also include the inspection of all onsite and offsite mixing tanks and equipment, and inspection of all vehicles which carry supplies and chemicals to oil field activities. These mixing tanks and vehicles carry large volumes of fractionating chemicals and gels, cements, drilling muds, and well treatment chemicals and acids that potentially may contaminate waters of the United States if leaks or spills occur.

6. Numeric Effluent Limitation

There are no additional requirements beyond those listed in Part VI.F. of this fact sheet.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at oil and gas facilities. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at oil and gas facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for oil and gas facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.I.5. of today's proposed permit.

a. Semiannual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in paragraphs XI.I.8.a.(1) through XI.I.8.a.(3) must monitor those storm water discharges identified below at least semiannually (2 times per year) except as provided in VI.E.7. (Sampling Waiver) and VI.E.6. (Representative Discharge). Permittees with facilities identified in Part XI.I.8.a. (below) must report in accordance with Part VI.B. of the permit (Reporting: Where to Submit) and paragraph XI.I.8.d. (Reporting: When to Submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in

hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Discharges of storm water associated with oil and gas well drilling activities;

(2) Discharges of storm water runoff associated with chemical, drilling mud, fractionating gel, cement, and well treatment mixing activities;

(3) Discharges of storm water associated with areas where a reportable quantity spill has occurred.

TABLE I–4

Parameter	Unit	Frequency	Sample type [1]
Total Flow	MG	2/year	Estimate.
Oil & Grease	mg/L	2/year	Grab.
Total Suspended Solids (TSS)	mg/L	2/year	Grab.
Chemical Oxygen Demand (COD)	mg/L	2/year	Grab.
Detergents (MBAS)[2]	mg/L	2/year	Grab.
pH	Standard	2/year	Grab.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.
[2] Required only for storm water discharges from vehicle or equipment cleaning areas.

b. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in paragraphs XI.I.8.b.(1) (below) must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in VI.E.7. (Sampling Waiver) and VI.E.6. (Representative Discharge). Permittees with facilities identified in Part XI.I.8.b. are not required to submit monitoring results, unless required in writing by the Director. However, such permittees must retain monitoring results in accordance with Part VI.E.4. (Reporting and Retention of Records). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Discharges of storm water from facilities with significant materials exposed to storm water.

TABLE I–5

Parameter	Unit	Frequency	Sample type [1]
Total Flow	MG	1/year	Estimate.
Oil & Grease	mg/L	1/year	Grab.
Total Suspended Solids (TSS)	mg/L	1/year	Grab.
Chemical Oxygen Demand (COD)	mg/L	1/year	Grab.
Detergents (MBAS)[2]	mg/L	1/year	Grab.
pH	Standard	1/year	Grab.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.
[2] Required only for storm water discharges from vehicle or equipment cleaning areas.

c. Sample type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquot taken in each hour of discharge for the entire discharge or for the first 3 hours of the discharge, with each aliquot being separated by a minimum period of 15 minutes. Grab samples only must be collected and analyzed for the determination of pH, cyanide, whole effluent toxicity, fecal coliform, and oil and grease.

d. Reporting: when to submit. Permittees that are required to conduct sampling pursuant to Part 8.a. shall monitor samples collected during the sampling periods running from January to June and during the sampling period from July to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than 12 months of information.

e. Other facilities with annual monitoring requirements. Permittees with facilities identified in Part XI.I.8.b. (Annual Monitoring) are not required to

submit monitoring results, unless required in writing by the Director.

J. Storm Water Discharges Associated With Industrial Activity From Mineral Mining and Processing Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from eleven major categories of facilities, including: "* * * (iii) facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of noncoal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or storm water contaminated by contact with, any overburden, raw material, intermediate products, finished products, by-products or waste products located on the site of such operations."

This section only covers storm water discharges associated with industrial activities from active and inactive mineral mining and processing facilities. Mineral mining and processing facilities eligible to seek coverage under this section include the following types of operations:

- Dimension Stone (SIC Code 1411).
- Crushed and Broken Limestone (SIC Code 1422).
- Crushed and Broken Granite (SIC Code 1423).
- Crushed and Broken Stone (SIC Code 1429).
- Construction Sand and Gravel (SIC Code 1442).
- Industrial Sand and Gravel (SIC Code 1446).
- Kaolin and Ball Clay (SIC Code 1455).
- Clay, Ceramic, and Refractory Minerals (SIC Code 1459).
- Potash, Soda, and Borate Minerals (SIC Code 1474).
- Phosphate Rock (SIC Code 1475).
- Chemical and Fertilizer Mineral Mining (SIC Code 1479).
- Miscellaneous Nonmetallic Minerals, Except Fuels (SIC Code 1499).

Storm water discharges covered by this section include all discharges where precipitation and storm water runon come into contact with significant materials including, but not limited to, raw materials, waste products, by-products, overburden, stored materials, and fuels. This includes storm water discharges from haul roads, access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility.

This permit may authorize storm water discharges associated with industrial activity that are mixed with storm water discharges associated with industrial activity from construction activities, provided that the storm water discharge from the construction activity is in compliance with the terms, including applicable Notice of Intent (NOI) or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

This section does not cover any discharge subject to effluent limitation guidelines, including storm water that combines with process wastewater. Storm water that does not come into contact with any overburden, raw material, intermediate product, finished product, by-product, or waste product located on the site of the operation are not subject to permitting under this section according to Section 402(l)(2) of the Clean Water Act. This section also does not apply to discharges from sites on Federal lands on which a claim has been established under the General Mining Laws but where no mining activities have been undertaken other than nominal claim-holding activities required by the Mining Law and applicable regulations.

This section is applicable to all phases of mining operations, whether active or inactive, as long as there is exposure to significant materials. This includes land disturbance activities such as the expansion of current extraction sites, active and inactive mining stages, and reclamation activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

There are typically three phases to a mining operation: the exploration and construction phase; the active phase; and the reclamation phase. The exploration and construction phase entails exploration and a certain amount of land disturbance to determine the financial viability of a site. Construction includes building of site access roads, and removal of overburden and waste rock to expose minable ore. These land-disturbing activities are significant potential sources of storm water contaminants. The active phase includes each step from extraction through production of a saleable product. The active phase may include periods of inactivity due to the seasonal nature of these mineral mining activities. The final phase of reclamation is intended to return the land to its pre-mining state.

Because of the land-disturbing nature of the mineral mining and processing industry, contaminants of concern generated by industrial activities in this industry include total suspended solids (TSS), total dissolved solids (TDS), turbidity, and pH. Table J–1 lists potential pollutant source activities, and related pollutants associated with mineral mining and processing facilities.

Industrial activities, significant materials, and material management practices associated with mineral mining and processing methods are typically similar, varying only in the type of rock being mined. Examples of mineral commodities obtained from mineral mining and processing facilities include: Crushed stone; construction sand and gravel; industrial sand; gypsum; asphaltic minerals; asbestos and wollastonite; lightweight aggregates; mica and sericite; barite; fluorspar; salines from brine lakes; borax minerals; potash; sodium sulfate; trona; rock salt; phosphate rock; frasch sulfur; mineral pigments; lithium; bentonite; magnesite; diatomite; jade; novaculite; fire clay; attapulite and montmorillonite; kyanite;

shale and common clay; aplite; tripoli; kaolin; ball clay; feldspar; talc, steatite, soapstone and pyrophylite; garnet; and graphite.

Industrial activities include, "* * * but [are] not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water" (40 CFR 122.26(b)(14)). The most common industrial activities at mineral mine sites include extraction of the mineral, material sizing by crushers, material sorting, and product washing.

TABLE J–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS

Activity	Pollutant source	Pollutant
Site Preparation	Road Construction	Dust, TSS, TDS, turbidity.
	Removal of Overburden	Dust, TSS, TDS, turbidity.
	Removal of waste rock to expose the mineral body.	Dust, TSS, TDS, turbidity.
Mineral Extraction	Blasting activities	Dust, TSS.
Mineral Processing Activities	Rock Sorting	Dust, TSS, TDS, turbidity, fines.
	Rock Crushing	Dust, TSS, TDS, turbidity, fines.
	Rock Washing	TSS, TDS, turbidity, pH.
	Raw Material Storage	Dust, TSS, TDS, turbidity.
	Waste Rock Storage	Dust, TSS, TDS, turbidity, pH.
	Raw Material Loading	Dust, TSS, TDS, turbidity.
	Processing materials unloading	Diesel fuel, gasoline, oil, lime.
	Raw or Waste Material Transportation	Dust, TSS, TDS, turbidity.
Other Activities	Sedimentation pond upsets	TSS, TDS, turbidity, pH.
	Sedimentation pond sludge removal and disposal.	Dust, TSS, TDS, turbidity, pH.
	Air emission control cleaning	Dust, TSS, TDS, turbidity.
Equipment/Vehicle Maintenance	Fueling activities	Diesel fuel, gasoline, oil.
	Parts cleaning	Solvents, oil, heavy metals, acid/alkaline wastes.
	Waste disposal of oily rags, oil and gas filters, batteries, coolants, degreasers.	Oil, heavy metals, solvents, acids.
	Fluid replacement including hydraulic fluid, oil, transmission fluid, radiator fluids, and grease.	Oil, arsenic, lead, cadmium, chromium, benzene, TCA, TCE, PAHs, solvents.
Reclamation Activities	Site preparation for stabilization	Dust, TSS, TDS, turbidity.

Sources: Storm water group applications, Part 1 and 2 and EPA. "Development Document on the Mineral Mining and Processing Point Source Category." (EPA 440/1–76/059b). July 1979.

Significant materials include, "* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under Section 101(14) of CERCLA; any chemical facilities required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge" (40 CFR 122.26(b)(12)). Significant materials commonly found at mining facilities include: overburden; waste rock; sub-ore piles; tailings; petroleum-based products; solvents and detergents; manufactured products; and other waste materials.

Materials management practices are defined as those practices employed to diminish contact by significant materials with precipitation and storm water runon, or practices utilized to reduce the offsite discharge of contaminants. To this end, sediment ponds, discharge diversion techniques, as well as methods of dispersion, are used to minimize impacts of significant materials on storm water. For mine sites requiring additional sources of water for processing operations, rainfall events as well as storm water runon will be managed for use in dust suppression, processing, and washing activities. Many mine sites are already equipped with sedimentation ponds and other established process wastewater treatment methods in order to meet effluent limitation guidelines. Additional storm water management practices used at mineral mining facilities include: discharge diversions; drainage/storm water conveyances; runoff dispersion; sediment control and collection practices; vegetation/soil stabilization; and capping contaminated sources.

Nonmetallic minerals are recovered using four basic forms of extraction techniques: open pit, open face or quarry mining; dredging; solution mining; and underground mining. Each type of extraction method may be followed by varying methods of beneficiation and processing. Presented below are brief descriptions of the industrial activities, significant materials, and materials management practices associated with these four extraction processes and associated beneficiation activities. Due to similarities in mining operations for many of the minerals within this sector, industrial activities, significant materials, and materials management practices are fairly uniform across this sector. Unique practices are noted.

a. Open pit, open face, or quarry mining. Many mineral mining and processing industries access mineral deposits using open pit, open face or quarrying extraction techniques. For

facilities producing dimension stone, crushed and broken stone, construction and industrial sand and gravel, clays, as well as other minerals (borate, phosphate, potash), surface mining is generally the most economical form of extraction.

(1) Industrial activities. Extraction activities include removal of overburden and waste rock to access mineral deposits. These land-disturbing activities generate piles of topsoil and other overburden as well as waste rock, which are typically stored beside, or within, the pit or quarry. In addition, land disturbance, blasting, crushing, and materials handling activities create large amounts of dust that are either dispersed by local wind patterns or collected in air pollution control mechanisms. At closure, overburden and waste rock may or may not be used to reclaim the pit or quarry depending on Federal, State and local requirements. In addition, access roads and rail spurs, and associated loading and unloading areas, are found onsite.

Following extraction, the mined materials may be transferred to a nearby beneficiation/processing facility or may be beneficiated within the pit or quarry. At a beneficiation/processing facility, unfinished materials may be subjected to dry or wet processing methods. Dry forms of processing include crushing, grinding, sawing, and splitting of the mined material. Wet processing may include simple washing, flotation, or heavy media separation.

(2) Significant materials. Significant materials generated by most extraction activities at open pit, open face, and quarry mines include overburden piles, waste rock piles, ore and subore piles, and materials spilled from loading and unloading activities. Other exposed materials that can be generated at these types of operations (as well as other mineral mines), include: Tailings from flotation and other separation stages; soils impacted by fugitive dust emissions; other process wastes such as clays from phosphate mines; settling ponds that receive process wastewaters; dredged sediment disposal areas; as well as raw material and product storage. Dust and particulate matter collected in air pollution control mechanisms may also be disposed of in onsite waste piles.

(3) Materials management practices. Materials management practices at open pit or quarry mining facilities are typically designed to control dust emissions and soil erosion from extraction activities, and offsite transport of significant materials. At many facilities structural Best Management Practices (BMPs) may have already been implemented to manage process wastewaters subject to effluent limitation guidelines. Settling ponds and impoundments are commonly used to reduce Total Suspended Solids (TSS), Total Dissolved Solids (TDS), and other contaminants in process generated wastewaters. These controls may also be used to manage storm water runoff and runon with potentially few alterations to onsite drainage systems. Some facilities included in part 1 of the group applications reported the use of storm water diversions to divert storm water away from pits and quarries, raw material piles, overburden, and waste rock piles.

Tailings impoundments are used to manage tailings generated at facilities engaged in flotation or heavy media separation operations. These impoundments are used to manage beneficiation/processing wastewaters generated at the facility and may also be used to manage storm water runoff.

b. Dredging. Dredging is an extraction method used to access nonmetallic mineral deposits located in quarries or pits (where completely or partially below the water table); in rivers; or estuaries; or offshore, in open bays or sounds. For these types of operations, ore is recovered using scooping devices and suction dredges. Minerals commonly excavated by dredging include sand and gravel, and calcium carbonate.

(1) Industrial activities. The industrial activities at dredging facilities include excavation of ore from underwater deposits (e.g., in stream beds of perennial or ephemeral streams) by dredges. Processing operations may occur on the dredge barges or at adjacent facilities. On-board processing activities may include: Screening; crushing of oversized material; washing; sand classification with hydraulic classifying tanks; gravel sizing; heavy media separation; and product loading/unloading.

Dredges that do not perform on-board processing operations load raw material on a tow-barge for transport to a land-based processing facility. Processing at land facilities typically includes washing to remove clay and other impurities; screening; sizing; crushing; classifying; and heavy media separation.

(2) Significant materials. Significant materials generated at dredging facilities include ore material piles, waste material piles of oversized, or otherwise unusable materials, and float waste from heavy media separation. Clays and undersized fines are dredging waste by-products that may be returned to the water but may also be stored in piles. Sand fines from gravel crushing operations that cannot be sold, are a major source of exposed waste material at land-based processing facilities. In addition, land-based facilities may also manage dredged sediments removed from onsite settling ponds. Haul roads, storage piles, on-land waste piles, processing operations, and loading/unloading operations are other potential sources of storm water pollutants at these facilities.

(3) Materials management practices. Hydraulic dredging operations in open pits or quarries, or land-based processing facilities, use settling ponds for the removal of clay particles, fines, and impurities from process wastewaters. These ponds may also be used to manage contaminated storm water runoff. Water from the settling ponds or basins may be returned to the wet pit to maintain water levels in the pit, or may be discharged offsite. Worked out pits may also be used to contain solid wastes such as fines and oversized materials. These pits are another potential source of storm water contamination in the event of heavy precipitation and subsequent overflow.

Dredging operations in open waters typically discharge process wastewater containing fines to the water body without treatment under the operator's Clean Water Act Section 404 permit.

c. Solution mining. Solution mining extracts minerals from hard rock mineral or natural brine sources by underground injection of a lixiviant into the ore zone. Minerals are recovered from solution, after the solution is brought to the surface, through evaporation or flotation. Since most solution mining extraction activities occur underground using water to extract values, the potential for these mineral deposits to be exposed to storm water is minimal. However, at the surface of solution mining operations, industrial activities and significant materials, such as haul roads, chemical storage areas, and raw material piles, are common to most sites. These industrial activities and significant materials are all susceptible to storm water exposure and require appropriate storm water management controls.

Descriptions of industrial activities performed by each type of solution mining are provided below. Since the mineral deposits are not exposed to storm water for this type of mining, "industrial activities" describes the type of extraction method used to obtain minerals, not activities susceptible to storm water exposure. Significant materials, and materials management practices do refer to those materials exposed to storm water, and to the

subsequent management practices used to control storm water.

Some of the minerals extracted using solution mining include: potash; soda; rock salt; borate minerals; chemical and fertilizer minerals such as barite, fluorspar, salines from lake brines; lithium; and mineral pigments. Many of these minerals may also be recovered using surface and/or underground extraction methods.

(1) Solution mining—injection—(a) Industrial activities—Rock salt and potash minerals may be recovered by injecting water into subsurface deposits and removing minerals in solution. Water is injected through a cased pipe drilled into a deposit. Saturated solution is then pumped to the surface for processing or storage. Processing may include evaporation, and/or flotation to separate the final product.

(b) Significant materials—Significant materials at an injection solution mining site may include product storage piles, chemical storage areas, and haul roads. Very little extracted solution remains onsite, since it is often re-injected into the formation.

(c) Materials management practices—Solution mining facilities typically operate in arid regions, and are able to use solar evaporation ponds to recover minerals from solution. Due to typically low precipitation and high evaporation rates in these areas, storm water materials management practices may not be prevalent.

(2) Solution mining—frasch sulfur—(a) Industrial activities—Sulfur is recovered from deposits using the Frasch sulfur process, which injects hot, purified, water into the subsurface to melt the mineral. Molten sulfur is pumped directly to heated tanks at the surface to maintain a saleable product in liquid form.

(b) Significant materials—Significant materials generated from Frasch sulfur mining include elemental sulfur, scrap sulfur, tank bottoms, water treatment sludge, bleedwater produced from bleed wells used to remove excess injection water, and drilling wastes such as muds, acidizing fluids and well workover fluids. Since molten sulfur product is piped directly from underground to enclosed storage tanks on the surface, it is not exposed to storm water.

(c) Materials management practices—Solid wastes such as elemental and scrap sulfur, tank bottoms, and water treatment sludge may be disposed of in onsite piles. Liquid wastes such as bleedwater, drilling muds, acidizing fluids and workover fluids are typically disposed of in reserve pits and/or workover pits. At the completion of drilling, pit contents may be dried prior to being covered by a liner and buried. Accumulated solids from these pits may also be mixed with clay for use as an additive in drilling muds.

Rainfall runoff and boiler blowdown may be discharged offsite without treatment. Other waste generated at these facilities include power plant wastes and wastewaters, wastewater from sealing wells, sanitary wastes, and miscellaneous other wastewaters collected in drips and drains.

(3) Solution mining—evaporation—(a) Industrial activities—Another form of solution mining uses evaporation and crystallization of saline waters to produce minerals. Potash, soda, borate, and other minerals, are produced from naturally occurring fluids such as sea water, or from evaporite mineral deposits such as western lake brines. Brines are typically pumped from beneath the crystallized surface of a lake and processed by evaporation and crystallization. Recovered salts are washed, dried and packaged for shipment.

(b) Significant materials/materials management practices—Significant materials associated with these facilities include raw material piles, evaporation ponds, and residual brines consisting of salts and end liquors, including various added process wastewaters. Residual brines generated may be left in solar evaporation ponds or dissolved and returned to the lake or injection wells.

d. Underground mining. Underground mining techniques are used to access mineral deposits located too far underground to access economically from the surface. Though typically a more expensive form of extraction, advantages to underground mining operations include year-round operation, less noise (applicable to facilities located near residential areas), and less surface land disturbance. While most nonmetallic minerals are extracted from surface operations, some minerals existing in bedded or other sedimentary deposits may be accessed by underground extraction techniques. Potash, salt, soda, and borate minerals, as well as chemical and fertilizer minerals, are some of the minerals extracted using this mining method.

(1) Industrial activities/significant materials. Industrial activities that may be associated with storm water discharges include: Loading/unloading activities; haul roads; products and materials storage; waste piles; and processing activities. Exposed materials associated with surface beneficiation and processing facilities at underground mines are similar to those associated with open pit, open face, and quarrying facilities.

(2) Materials management practices. Materials management practices for significant materials at the surface of underground mining facilities are similar to those materials management practices used at open pit, open face, and quarrying operations.

e. Inactive mine sites. Inactive mineral mining and processing operations are those where industrial activities are no longer occurring. When active, mineral extraction could have occurred from open pits or open face mines, solution mines, dredging operations, or underground mines. These sites are included in this section because significant materials may remain onsite. These materials, if exposed, are potential sources of storm water pollutants. Until an inactive mineral mining and processing facility has been reclaimed under applicable State or Federal laws, the site is considered associated with an "industrial activity" and is subject to this section. Due to the seasonal nature of this industry, many mine sites can become temporarily inactive for extended periods.

2. Pollutants in Storm Water Discharges Associated with Mineral Mining and Processing Facilities

Impacts caused by storm water discharges from active and inactive mineral mining and processing operations will vary. Several factors influence to what extent significant materials from mineral mining and processing operations may affect water quality. Such factors include: geographic location; hydrogeology; the type of mineral extracted; the mineralogy of the extracted resource and the surrounding rock; how the mineral was extracted (e.g., quarrying/open face, dredging, solution, or underground mining operations); the type of industrial activities occurring onsite (e.g., extraction, crushing, washing, processing, reclamation etc.); the size of the operation; and type, duration, and intensity of precipitation events. Each of these and other factors will interact to influence the quantity and quality of storm water runoff. For example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities while materials storage is a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,[92] spills, and other

[92] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining

improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

The part 2 group application data requirements did not identify individual site characteristics which may be responsible for elevated or insignificant conventional pollutant loadings. In addition, the poor response from sampling facilities did not allow for a subsector analysis of the sampling data. Therefore, the only option available to EPA was to use the data in the aggregate.

EPA has found that some group organizers submitting part 2 sampling data sampled at improper locations, did not conduct both grab and flow-weighted composite samples, or sampled process wastewater discharges instead of storm water discharges. Information in the part 2 submissions made it clear that many facilities have sampled impoundments of commingled process wastewater and storm water. Therefore, facilities sampling discharges from process wastewater impoundments do not represent offsite storm water discharges. It is important to note that under 40 CFR part 436 commingled process wastewater and storm water is permitted as a process wastewater.

Although many of the part 2 data submittals were incomplete and did not identify the sources of pollutants as required in Form 2F, EPA has identified the storm water pollutants and sources resulting from various mineral mining and processing activities in Table J–1. Table J–1 identifies total suspended solids (TSS), total dissolved solids (TDS), turbidity, total phosphorus, and pH as the parameters of concern at mining facilities:

• Total Suspended Solids (TSS) in storm water discharges from mineral mining and processing facilities will primarily consist of inorganic materials such as sand, silt, and clay. A relatively minor fraction of organic TSS, in the form of oil and grease, may result from contact with equipment. Because suspended solids increase the turbidity of water, less light is able to penetrate the water, reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that may be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish.

Mining facilities typically involve large areas of land denuded of vegetation and direct exposure of significant materials to precipitation. The nature of active and temporarily inactive mining operations will always have areas of the site susceptible to the offsite transport of sediments.

• pH represents the hydrogen-ion concentration in an aqueous solution. It is defined as the negative logarithm of the hydrogen-ion concentration in a solution. On the pH scale ranging from zero to fourteen, a value of seven represents neutral conditions in which the concentrations of hydrogen and hydroxyl ions are equal. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions. pH is the most commonly limited parameter in effluent limitation guidelines for the mineral mining and processing category (40 CFR Part 436). See Table J–3. Data submitted for part 2 of the application indicate that pH varies from a minimum of 2.7 to a high of 10.0. These values are outside the permitted range for wastewater discharges under effluent limitation guidelines. However, most samples submitted to EPA were within the 6.0 to 9.0 range.

Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change.

• Total Phosphorus is comprised of dissolved and suspended phosphorus. Phosphorus occurs in natural waters and wastewaters almost exclusively as phosphates. Phosphates are found in bottom sediments and in biological sludge. Phosphorus is essential to the growth of organisms and may be the nutrient that limits the primary productivity of a body of water. In instances where phosphate is a growth limiting nutrient, the discharge of raw or untreated wastewater, agricultural drainage, or certain industrial wastes to that water may stimulate the growth of photosynthetic aquatic organisms in nuisance quantities.

Total phosphorus is a pollutant of concern because of the presence of phosphate mines in the sector and because of the usage of fertilizer to assist revegetation of reclaimed areas. Fertilizer spread on recently planted areas, or applied in too large of quantities, is susceptible to offsite transportation via storm water discharges.

• Total Dissolved Solids (TDS) are a gross measure of the amount of soluble pollutants in the storm water. It is an important parameter in drinking water supplies and water used for irrigation. Waters containing more than 4,000 mg/L of total salts are generally considered unfit for human consumption. Generally, palatable water for human consumption should not exceed 500 mg/L. Water with a total dissolved solid content greater than 500 mg/L has little or no value for irrigation. Dissolved solids are found in significant quantities in rock salt, brine, and trona operations. Monitoring data for total dissolved solids, was not required for part 2 of the group application process. Visual observations of storm water will help facility operators and EPA understand to what extent TDS arises from storm water discharges from mineral mining and processing facilities.

• Biochemical Oxygen Demand (BOD_5), Chemical Oxygen Demand (COD), Nitrate+Nitrite Nitrogen, and Total Kjeldahl Nitrogen (TKN) are not considered to be pollutants of concern for mineral mining and processing facilities. The data included in part 2 of the application and EPA's Mineral Mining and Processing Development Document do not support continued chemical monitoring for these pollutants. Therefore, storm water monitoring will not be required for BOD_5, COD, Nitrate+Nitrite Nitrogen or TKN.

• Heavy metals are not a concern for this industry, based on the data received with part 2 of the application, EPA's Mineral Mining and Processing Development Document, and an understanding of the processes. Only one facility submitted data for heavy metals. The metals for which data was submitted include copper, lead, zinc, and cadmium. Heavy metals were measured to be less than 10 mg/L. All other facilities did not sample because no evidence was found to indicate that heavy metal loadings were greater than 10 ppb.

• Oil and grease sources from mineral mining and processing facilities include vehicle maintenance activities and onsite processing equipment and conveyors. Water impacted by oil and grease from onsite machinery may exhibit an oxygen demand. Oil and grease emulsions are also detrimental to aquatic organisms and inhabitants because: (1) Deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting

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and processing facilities is low yet it still may be applicable at some operations.

a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

Monitoring for oil and grease is not necessary for mineral mining and processing facilities. The data submitted with part 2 of the application indicated a range of minimum and maximum oil and grease values from 0.5 to 10.0 mg/L.

The part 2 data analyzed by EPA showed large variations in the minimum and maximum values for each of the eight conventional pollutants monitored. This is especially true for total suspended solids where grab sample values ranged from 0 mg/L to 27,100 mg/L, and flow-weighted composite sample values ranged from 0 mg/L to 10,680 mg/L. Group application sampling facilities were not required to monitor for TDS and turbidity. However, EPA's development document for the mineral mining and processing industry, as well as other literature concerned with land-disturbing activities, indicates that TDS and turbidity levels increase with an increase in TSS loadings.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. However, the values were typically low. Table J–2 indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the number of data points analyzed for each of the conventional pollutants.

Part 2 data submissions identify the need to limit offsite discharge of TSS. EPA believes that if TSS loadings are reduced there will also be a reduction in TDS loadings and turbidity. Therefore, EPA is requiring all permittees to consider management practices that limit the contact between storm water and significant materials and to control the offsite discharge of contaminated storm water.

3. Options for Controlling Pollutants

There are two options for reducing pollutants in storm water discharges: end-of-pipe treatment and implementing Best Management Practices to prevent and/or eliminate pollution. Discharges from mining operations are in some ways dissimilar to other types of industrial facilities. Mining facilities are often in remote locations and may operate only seasonally or intermittently, yet need year-round controls because significant materials remain exposed to precipitation when reclamation is not completed. These characteristics make resource intensive end-of-pipe management controls less desirable.

TABLE J–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i]

[mg/L, except as noted]

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	55	51	7.1	5.9	0	0	35.0	19.0	5.0	5	24.0	17.0	35.0	19.0
COD	56	51	56.8	55.2	0	0	404.0	537.0	33	37	247.0	185.0	404.0	537.0
Nitrate+Nitrite Nitrogen	50	48	.86	1.3	0	0	9.0	8.8	.65	.76	3.0	4.2	9.0	8.8
Total Kjeldahl Nitrogen	49	44	1.74	2.41	0	0	10.0	49.0	1.05	.84	5.0	6	10.0	49.0
Oil and Grease	50	N/A	1.1	N/A	0	N/A	10.0	N/A	0	N/A	5.5	N/A	10.0	N/A
pH (s.u.)	58	N/A	N/A	N/A	2.7	N/A	10.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	46	46	.64	1.13	0.0	0.0	7.06	18.0	.2	.24	4.7	2.6	7.1	18.0
Total Suspended Solids	51	50	1848	1576	0	0	27100	13300	181	296	11120	10060	27100	13300

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

A comprehensive storm water management program for a given plant may include controls from each of these categories. Development of comprehensive control strategies should be based on a consideration of site and facility plant characteristics.

a. End-of-pipe treatment. At many mineral mining and processing operations, it may be appropriate to collect and treat the runoff from targeted areas of the facility. This approach was taken with 12 industrial categories within the mineral mining and processing industry, subject to national effluent limitation guidelines for process water. Table J–3 identifies the effluent limitation guidelines for process water and for the mineral mining and processing sector. There are several areas where process wastewater guidelines influence the permitting strategy for storm water discharges:

- Whenever storm water and process wastewater combine, the storm water is treated as process wastewater
- To meet the numeric effluent limitation for process water, most, if not all, facilities must collect and temporarily store onsite runoff from targeted areas of the plant
- The effluent limitation guidelines do not apply to discharges whenever rainfall events, either chronic or catastrophic, cause an overflow of storage devices designed, constructed, and maintained to contain a 10-year, 24-hour storm
- Most technology-based treatment standards, used for treating process waters, are based on relatively simple technologies such as settling of solids, neutralization, and drum filtration.

End-of-pipe treatments are effective means to control process wastewaters because the types of pollutants and the volume of water to be treated are known. However, storm water discharges from mineral mining and processing facilities can be numerous, intermittent, and of various volumes. Channelization of all storm water that comes into contact with significant materials into a single treatment facility, or construction of numerous treatment devices for each discharge is too burdensome for the regulated community. Therefore, EPA believes that the most appropriate means of storm water management at mineral mining and processing facilities are BMPs. BMPs allow the mine site operator to choose a particular BMP that is best for the characteristics of a particular site and to control parameters of concern.

b. Best management practices. EPA believes that the most effective storm water management controls for limiting the offsite discharge of storm water pollutants from mineral mining and processing facilities are source reduction BMPs. Source reduction BMPs are methods by which discharges of contaminants are controlled with little or no required maintenance. Examples of these types of controls include source reduction diversion

dikes, vegetative covers, and berms. Source reduction practices are typically (but not always) low in cost and relatively easy to implement. In some instances, more resource intensive treatment BMPs, including sedimentation ponds, may be necessary depending upon the type of discharge, types and concentrations of contaminants, and volume of flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with mining activity.

The following six categories describe best management practice options for reducing pollutants in storm water discharges from mineral mining and processing operations:

- Discharge Diversions.
- Drainage/Storm Water Conveyance Systems.
- Runoff Dispersion.
- Sediment Control and Collection.
- Vegetation/Soil Stabilization.
- Capping of Contaminated Sources.

TABLE J–3.—MINERAL MINING AND PROCESSING: EFFLUENT LIMITATION GUIDELINES

SIC code	Category	Subcategory	Effluent guidelines
1411 ..	Dimension Stone	N/A	Reserved.
1422 ..	Crushed and Broken Limestone	N/A	For facilities that recycle process waste water: pH 6.0–9.0. Mine dewatering discharges: pH 6.0–9.0. In no case shall a pH limitation outside the range of 5.0–9.0 be permitted.
1423 ..	Crushed and Broken Granite		
1429 ..	Crushed and Broken Stone, Not Elsewhere Classified		
1442 ..	Construction Sand and Gravel	N/A	For facilities that recycle process waste water: pH 6.0–9.0. Mine dewatering discharges: pH 6.0–9.0. In no case shall a pH limitation outside the range of 5.0–9.0 be permitted.
1446 ..	Industrial Sand	N/A	All operations except HF flotation: TSS Not to exceed 45mg/L maximum for any 1 day; average over 30 days not to exceed 25 mg/L. pH Within range 6.0–9.0. For facilities using HF flotation: TSS Not to exceed 0.046 mg/L maximum for any 1 day; average over 30 days not to exceed 0.023 mg/L. Total Fluoride—Maximum for 1 day: 0.006 mg/L; average over 30 days: 0.003 mg/L. pH Within range 6.0–9.0. Mine dewatering discharges: TSS Maximum for 1 day: 45 mg/L; average over 30 days: 25 mg/L. pH Within range 6.0–9.0.
1455 ..	Kaolin and Ball Clay	Ball Clay Kaolin	Reserved.
1459 ..	Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified.	Bentonite, Magnesite	No Discharge.
		Feldspar, Fire Clay, Attapulgite and Montmorillonite, Kyanite, Shale and Common Clay, Aplite.	Reserved.
1474 ..	Potash, Soda, and Borate Minerals	Borax, Potash, Sodium Sulfate	No Discharge.
		Trona, Rock Salt	Reserved.
1475 ..	Phosphate Rock	N/A	Existing Sources. TSS Maximum for any 1 day: 60 mg/L; average over 30 days: 30 mg/L. pH Within range 6.0–9.0. New sources, process generated wastewater and mine dewatering discharges: TSS Maximum for any 1 day: 60 mg/L; average over 30 days: 30 mg/L. pH Within range 6.0–9.0.
1479 ..	Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified.	Barite, Fluorspar, Salines from Brine, Lakes, Frasch Sulfur.	No Discharge.
		Mineral Pigments, Lithium	Reserved.
1499 ..	Miscellaneous Nonmetallic Minerals, Except Fuels.	Graphite	Process waste water and mine drainage subject to ELG: TSS Maximum for any 1 day: 20 mg/L; average over 30 days: 10 mg/L.

TABLE J–3.—MINERAL MINING AND PROCESSING: EFFLUENT LIMITATION GUIDELINES—Continued

SIC code	Category	Subcategory	Effluent guidelines
			Total Fe Maximum for any 1 day: 2 mg/L; average over 30 days: 1 mg/L. pH Within range 6.0–9.0
		Gypsum, Asphaltic Minerals, Asbestos and, Wollastonite, Diatomite, Jade, Tripoli (Dry Processes Only).	No discharge.
		Garnet, Talc, Steatite, Soapstone, Pyrophyllite, Mica and Sericite.	Reserved.

Typical land disturbance activities at mineral mining and processing sites include roads, open pits and quarries, topsoil, overburden, waste rock, subore, ore and product piles; materials storage, mill tailings, ponds and piles, as well as vehicle maintenance and storage areas. Because mineral mining and processing is largely a land disturbance activity, BMPs that minimize erosion and sedimentation will be most effective if installed at the inception of operations and maintained throughout active operations and reclamation of the site. From the construction of access and haul roads to closure and reclamation activities, implementation of BMPs is often essential to minimizing long-term environmental impacts to an area.

Part 1 group application data indicate that several types of BMPs have been implemented at sampling facilities. Commonly used BMPs were sediment control and collection and discharge diversion devices. However, the group application process did not require a description of BMP locations and did not require applicants to describe the number of identical BMPs implemented at each site. As a result, the effectiveness of BMPs for storm water management, at these facilities cannot be evaluated.

In addition, many of the BMPs listed by facilities may have been implemented as process wastewater treatment mechanisms and are not exclusively used for storm water management. For instance, 43 percent of the sampling subgroup reported using ponds for sediment control and collection. Since some facilities classified as SIC Code 14 are subject to process water effluent limitation guidelines, sedimentation ponds may have been implemented to meet the limit.

Because BMPs described in the part 1 data are limited, EPA is providing an overview of supplementary BMPs for use at mineral mining and processing facilities. However, due to the site-specific nature of facilities within this sector, BMPs cited do not preclude the use of other viable BMP options. Table J–4 summarizes BMP options as they apply to land disturbance activities at mineral mining and processing facilities. Sources of BMP information include: "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990; "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September, 1992 (EPA 832–R–92–006); "Best Management Practices for Mining in Idaho," Idaho Department of Lands, November 1992; and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

- *Haul Roads and Access Roads*—Placement of haul roads or access roads should occur as far as possible from natural drainage areas, lakes, ponds, wetlands or floodplains where soil will naturally be less stable for heavy vehicle traffic. If a haul road must be constructed near water, as little vegetation as possible should be removed from between the road and the waterway, as vegetation is a useful buffer against erosion and is an efficient sediment collection mechanism. The width and grade of haul or access roads should be minimal and should be designed to match natural contours of the area. Construction of haul roads should be supplemented by BMPs that divert runoff from road surfaces, minimize erosion, and direct flow to appropriate channels for discharge to treatment areas.

- *Pits or Quarries*—Excavation of a pit or quarry must be accompanied by BMPs to minimize impacts to area surface waters. As discussed in construction of haul roads, as little vegetation as possible should be removed from these areas during excavation activities to minimize exposed soils. In addition, stream channels and other sources of water that may discharge into a pit or quarry should be diverted around that area to prevent contamination.

TABLE J–4.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES

Land-disturbed area	Discharge diversions	Conveyance systems	Runoff dispersion	Sediment control & collection	Vegetation	Containment
Haul Roads and Access Roads.	Dikes, Curbs, Berms.	Channels, Gutters, Culverts, Rolling Dips, Road Sloping, Roadway Water Deflectors.	Check Dams, Rock Outlet Protection, Level Spreaders, Stream Alteration, Drop Structures.	Gabions, Riprap, Native Rock Retaining Walls, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetated Buffer Strips.	Seeding, Willow Cutting Establishment.	

TABLE J–4.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES—Continued

Land-disturbed area	Discharge diversions	Conveyance systems	Runoff dispersion	Sediment control & collection	Vegetation	Containment
Pits/Quarries or Underground Mines.	Dikes, Curbs, Berms.	Channels, Gutters	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Sediment Settling Ponds, Straw Bale Barrier, Siltation Berms.	Seeding	Plugging and Grouting.
Overburden, Waste Rock and Raw Material Piles.	Dikes, Curbs, Berms.	Channels, Gutters	Serrated Slopes, Benched Slopes, Contouring, Stream Alteration.	Plastic Matting, Plastic Netting, Erosion Control Blankets, Mulch-straw, Compaction, Sediment/Settling Ponds, Silt Fences, Siltation Berms.	Topsoiling, Seedbed Preparation, Seeding.	Capping.
Reclamation	Dikes, Curbs, Berms.	Channels, Gutters	Check Dams, Rock Outlet Protection, Level Spreaders, Serrated Slopes, Benched Slopes, Contouring, Drain Fields, Stream Alteration, Drop Structures.	Gabions, Riprap, and Native Rock Retaining Walls, Biotechnical Stabilization, Straw Bale Barriers, Sediment Traps/Catch Basins, Vegetative Buffer Strips, Silt Fences, Siltation Berms, Brush Sediment Barriers.	Topsoiling, Seedbed Preparation, Seeding, Willow Cutting Establishment.	Capping, Plugging and Grouting.

BMPs can be used to control total suspended solids levels in runoff from unvegetated areas. These can include sediment/settling ponds, check dams, silt fences, and straw bale barriers.

• *Overburden, Waste Rock, and Raw Material Piles*—Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles should be located away from surface waters and other sources of water, and from geologically unstable areas. If this is not practicable, surface water should be diverted around the piles. As many piles as possible should be revegetated (even if only on a temporary basis). At closure, remaining units should be reclaimed.

• *Reclamation Activities*—When a mineral deposit is depleted and operations cease, a mine site must be reclaimed according to appropriate State or Federal standards. Closure activities typically include restabilization of any disturbed areas such as access or haul roads, pits or quarries, sedimentation ponds or work-out pits, and any remaining waste piles. Overburden and topsoil stockpiles may be used to fill in a pit or quarry (where practical). Recontouring and vegetation should be performed to stabilize soils, and prevent erosion.

Major reclamation activities such as recontouring roads and filling in a pit or quarry can only be performed after operations have ceased. However, reclamation activities such as stabilization of banks and reseeding and revegetation should be implemented in mined out portions, or inactive areas of a site as active mining moves to new areas.

EPA recognizes that quarries are frequently converted into reservoirs or recreational areas, after the mineral deposit is depleted. However, this does not preclude the reclamation of disturbed areas above the quarry rim.

(1) Discharge diversions. Discharge diversions provide the first line of defense in preventing the contamination of discharges and the subsequent contamination of receiving waters of the United States. Discharge diversions are temporary or permanent structures installed to divert flow, store flow, or limit storm water runon and runoff.

These diversion practices have several objectives. First, diversion structures can be designed to prevent otherwise uncontaminated (or less contaminated) water from crossing disturbed areas or areas containing significant amounts of contaminated materials, where contact may occur between runon and significant materials. These source reduction measures may be particularly effective for mineral mining and processing operations to prevent runon of uncontaminated discharges from contacting exposed materials and/or reduce the flow across disturbed areas, thereby lessening the potential for erosion. Second, diversion structures can be used to collect or divert waters for later treatment if necessary. The usefulness of these control measures are limited by such factors as the size of the area to be controlled and the type and nature of materials exposed and precipitation events.

Diversion dikes, curbs, and berms are temporary or permanent diversion structures that prevent runoff from passing beyond a certain point, and divert runoff away from its intended path. Dikes, curbs or berms may be used to surround and isolate areas of concern at mineral mining and processing sites, diverting flow around piles of overburden, waste rock, and storage areas, to minimize discharge contact with contaminated materials and to limit discharges of contaminated water from confined areas.

(2) Drainage/storm water conveyance systems. Drainage or storm water conveyance systems can provide either a temporary or a permanent management practice which functions

to channel water away from eroded or unstabilized areas, convey runoff without causing erosion, and/or carry discharges to more stabilized areas. The use of drainage systems as a permanent measure may be most appropriate in areas with extreme slopes, areas subject to high velocity runoff, and other areas where the establishment of substantial vegetation is infeasible or impractical. For instance, several BMPs described below may be useful storm water and erosion control methods applicable to road construction and maintenance activities.

• *Channels or gutters*—Channels or gutters collect storm water runoff and direct its flow. Like diversion systems, channels or gutters may act to divert runoff away from a potential source of contamination, but may also be used to channel runoff to a collection and/or treatment area including settling ponds, basins or work-out pits.

• *Open top box culverts, and waterbars*—These structures are temporary or permanent structures that divert water from a roadway surface. Open top box culverts may be used on steeply graded, unpaved roads in place of pipe culverts to divert surface runoff and flow from inside ditches onto the downhill slope of a road. These structures are typically made of wood and should periodically be monitored and repaired if necessary.

Waterbars are berms built by a dozer or by hand to a one to two foot height. They serve to extend the entire width of the road, with a downslope angle between 30 and 40 percent. Waterbars are kept open at a discharge end to allow water to flow away from the road and require little maintenance. These berms may be used as temporary or permanent structures.

• *Rolling Dips and Road Sloping*—Rolling dips and road sloping are permanent water diversion techniques installed using natural contours of the land during road construction. These BMPs prevent water accumulation on road surfaces and divert surface runoff toward road ditches which then convey the storm water to ponds or other management areas.

• *Roadway Surface Water Deflector*—A roadway surface water deflector is another technique to prevent accumulation of water on road surfaces. The structure uses a conveyor belt sandwiched between two pieces of treated wood and placed within the road to deflect water. This is a useful technique for steeply graded, unpaved roads.

• *Culverts*—Culverts are permanent surface water diversion mechanisms used to convey water off of, or underneath a road. Made of corrugated metal, they must extend across the entire width of the road and beyond the fill slope. Additional erosion control mechanisms may need to be installed at the discharge end of the culvert.

(3) Runoff dispersion. Drainage systems are most effective when used in conjunction with runoff dispersion devices designed to slow the flow of water discharged from a site. These devices also aid storm water infiltration into the soil and flow attenuation. Some examples of velocity dissipation devices include check dams, rock outlet protection, level spreaders, and serrated and benched slopes.

• *Check Dams*—Check dams are small temporary dams constructed across swales or drainage ditches to reduce the velocity of runoff flows thereby reducing erosion and failure of the swale or ditch. This slowing reduces erosion and gullying in the channel and allows sediments to settle.

Check dams may be installed in small temporary or permanent channels where vegetation of the channel lining is not feasible and where there is danger of erosion. These may be areas where installation of nonerosive liners are not cost effective.

Check dams diminish the need for more stringent erosion control practices in the drainage ditch since they decrease runoff velocity. When constructing check dams, the use of overburden or waste rock should be avoided where there is the potential for contamination.

• *Rock Outlet Protection*—Rock protection placed at the outlet end of culverts, channels, or ditches reduces the depth, velocity, and destructive energy of water such that the flow will not erode the downstream reach. The use of some materials (e.g., mine waste rock or ore) should be avoided where contamination may occur. As with check dams, rock outlet protection may also be used as a source reduction treatment mechanism by using rocks containing limestone or other alkaline materials to neutralize acidic discharges.

• *Level Spreaders*—Level spreaders are outlets for dikes and diversions consisting of an excavated depression constructed at zero grade across a slope. Level spreaders diffuse storm water point sources and release it onto areas stabilized by existing vegetation.

• *Serrated Slopes and Benched Slopes*—These runoff dispersion methods break up flow of runoff from a slope, decreasing its ability to erode. Serrated and benched slopes provide flat areas that allow water to infiltrate, and space for vegetation to grow and reinforce soils. Serrated slopes are equipped with small steps, from one to two feet of horizontal surface exposed on each step. Benched slopes have larger steps with vertical cuts between two and four feet high.

• *Contouring*—Surface contouring is the establishment of a rough soil surface amenable to revegetation through creating horizontal grooves, depressions, or steps that run with the contour of the land. Slopes may also be left in a roughened condition to reduce discharge flow and promote infiltration. Surface roughening aids in the establishment of vegetative cover by reducing runoff velocity and giving seed an opportunity to take hold and grow.

This technique is appropriate for all slopes steeper than 3:1 in order to facilitate stabilization of the slope and promote the growth of a vegetative cover. Once areas have been contoured, they should be seeded as quickly as possible.

• *Drain Fields*—Drain fields are used to prevent the accumulation of water and/or ground water at a site by diverting infiltrating sources through gravity flow or pumping. Typically filled with porous, permeable materials such as graded rock, or perforated pipe, and lined with geotextile fabric, these mechanisms are useful underneath significant materials, reducing the amount of water that ultimately comes into contact with significant materials.

• *Stream Alteration*—Altering or channelizing the path of a stream to bypass all or some disturbed areas on a site, allows additional mining activities and avoids contamination of stream water by disturbed lands. This practice is complicated, however, by the need to restore the channel when mining operations end.

• *Drop Structures*—Drop structures are large angular rocks placed in a V-shaped pattern to slow the velocity of storm water runoff. These structures are typically reinforced by logs or large rocks imbedded in the streambanks.

(4) Sediment control and collection. Sediment control and collection limits movement and retains sediments from being transported offsite. Several structural collection devices have been developed to remove sediment from runoff before it leaves the site. Several methods of removing sediment from site runoff involve diversion mechanisms previously discussed, supplemented by a trapping or storage device. Structural practices typically involve filtering diffuse storm water flows through temporary structures such as straw bale dikes, silt fences, brush barriers or vegetated areas.

Structural practices are typically low in cost. However, structural practices require periodic removal of sediment to remain functional. As such, they serve as more active-type practices which may not be appropriate for permanent use at inactive mines. However, these practices may be effectively used as temporary measures during active operation and/or prior to the final implementation of permanent measures.

a. Temporary Treatments.

• *Plastic Matting, Plastic Netting, and Erosion Control Blankets*—These BMPs are used to protect bare soils and control dust and erosion. Mats and blankets help to promote vegetative growth by maintaining moisture and heat within the soil. Plastic matting and netting improve slope stabilization and may be used as a permanent treatment to encourage grass growth. Plastic netting is a more effective material to use while promoting growth of vegetation as it permits sunlight to penetrate through to the soils. Erosion control blankets also stabilize slopes and control erosion. These blankets may be made of jute or plastic netting which are more expensive than straw.

• *Mulch-straw or Wood Chips*—Mulches and wood chips are useful temporary covers for bare or seeded soils with an erosion control effectiveness rating of 75 to 98 percent.[93] Like matting, mulch-straw or wood chips help soils retain moisture and warmth to promote vegetative growth. Used on slopes and/or in combination with nylon netting, these materials may prevent erosion by wind and water. Over time, however, the mulch cover will decrease in effectiveness.

• *Compaction*—Soil compaction using a roller or other heavy equipment increases soil "strength" by increasing its density. More dense soil is less prone to erosion and long-term soil settlement. The surface of compacted soils should be roughed and seeded or vegetated to increase its durability.

(b) Permanent Treatments.

• *Sediment/Settling Ponds*—Sediment ponds function as sediment traps by containing runoff for long periods of time, allowing suspended solids to settle. These structures can achieve a high removal rate of sediment for both process wastewater and storm water discharges. Sediment/settling ponds are easily constructed and require minimal maintenance. Their flexibility to treat both process wastewater and storm water makes the use of ponds a desirable treatment for discharges from mineral mining and processing facilities. Of course, site characteristics must be such that some or all discharges can be practically channeled to a centralized area for treatment. Where this is not practical, the cost of constructing multiple sediment ponds may become prohibitive. In addition, periodic dredging may be required in order to maintain the capacity of these ponds.

Discharge ponds may also be designed to act as surge ponds which are designed to contain storm surges and then completely drain in about 24 to 40 hours, and remain dry during times of no rainfall. They can provide pollutant removal efficiencies that are similar to those of detention ponds.[94] Storm surge ponds are typically designed to provide both water quality and water quantity (flood control) benefits.[95]

• *Gabions, Riprap, and Native Rock Retaining Walls*—These BMPs are all forms of slope stabilization. Gabions consist of rocks (riprap) contained by rectangular wire boxes or baskets for use as permanent erosion control structures. Riprap consists of loose rocks placed along embankments to prevent erosion. Native rock retaining walls are another form of slope stabilization, with walls up to five feet in height, constructed from native rock to reinforce a steep slope.

• *Biotechnical Stabilization*—Biotechnical stabilization uses live brush imbedded in the soils of a steep slope to prevent erosion. This method relies on the premise that the imbedded vegetation will eventually root and help stabilize the slope.

• *Straw Bale Barrier*—Straw bales may be used as temporary berms, barriers, or diversions; capturing sediments, filtering runoff. When installed and maintained properly, these barriers remove approximately 67 percent of the sediment load.[96] These barriers are applicable across small swales, in ditches, and at the toe of bare slopes where there is a temporary large volume of sediment laden runoff.

• *Sediment Traps or Catch Basins*—These temporary or permanent structures are useful for catching and storing sediment laden storm water runoff and are particularly useful during construction activities to contain runoff. The effectiveness of these BMPs is better in smaller drainage basin areas. Sediment traps are less than 50 percent effective in removing sediment from storm water runoff.[97]

• *Vegetated Buffer Strips*—The installation of vegetated buffer strips will reduce runoff and prevent erosion at a removal efficiency rate of 75 to 99 percent depending upon the ground cover.[98] In addition, vegetated buffer strips catch and settle sediment contained in the storm water runoff prior to reaching receiving waters.

• *Silt Fence/Filter Fence*—A low fence made of filter fabric, wire and steel posts, should be used on small ephemeral drainage areas where storm water collects or leaves a mine site. Silt fences remove 97 percent of the sediment load and are easier to maintain and remove without creating lasting impacts to the environment.[99] Silt and filter fences need to be inspected periodically and may not be as effective as straw bales, since fabric may become clogged with fine particles preventing water flow.

Silt fences may have limited applicability for large areas. They are most effective for use in a small drainage areas. These fences may also be used in conjunction with nonstructural practices to maintain the integrity of soil prior to the establishment of vegetation.

• *Siltation Berms*—Siltation berms are typically placed on the downslope side of a disturbed area to act as an impermeable barrier for the capture and retention of sediments in surface water runoff. Plastic sheeting is typically used to cover the berm. The berm and the plastic sheeting may require periodic maintenance and repair.

• *Brush Sediment Barriers*—Brush barriers are temporary sediment barriers composed of tree limbs, weeds, vines, root mat, soil, rock and other cleared materials placed at the toe of a slope. A brush barrier is effective only for small drainage areas, usually less than ¼ acre, where the slope is minimal.

Brush barriers do not function as permanent barriers since over time the barrier itself will degrade. This BMP is most effective when located at the toe of a slope of an area in which vegetation is being grown or during temporary operations. The brush barriers remove any excessive sediment generated by erosion prior to the establishment of vegetation.

(5) Vegetation Practices. Vegetation practices involve establishing a

[93] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990.

[94] "Urban Targeting and BMP Selection," EPA, Region V, November 1990.

[95] "Urban Surface Water Management," Walesh, S.G., Wiley, 1989.

[96] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–14.

[97] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–26.

[98] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–7.

[99] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–15.

sustainable ground cover by permanent seeding, mulching, sodding, and other such practices. A vegetative cover reduces the potential for erosion of a site by: absorbing the kinetic energy of raindrops which would otherwise impact soil; intercepting water so it can infiltrate into the ground instead of running off and carrying contaminated discharges; and by slowing the velocity of runoff to promote onsite deposition of sediment. Vegetative controls are often the most important measures taken to prevent offsite sediment movement and can provide a six-fold reduction in the discharge of suspended sediment levels.[100] Permanent seeding has been found to be 99 percent effective in controlling erosion for disturbed land areas.[101] Many States require that topsoil be segregated from other overburden for use during reclamation. While stored, topsoil stockpiles should be vegetated. This temporary form of vegetation can often be used for other piles of stored materials and for intermittent/seasonal operations.

Typically, the costs of vegetative controls are low relative to other discharge mitigation practices. Given the limited capacity to accept large volumes of runoff and potential erosion problems associated with large concentrated flows, vegetative controls should typically be used in combination with other management practices. These measures have been documented as particularly appropriate for mining sites.

- *Topsoiling, Seedbed Preparation*—The addition of a layer of topsoil or plant growth material provides an improved soil medium for plant growth. Seedbed preparation may include the addition of topsoil ingredients to be mixed in with soils used for seedbed preparation. Ripping, dicing, and mixing soils promotes weed control and aerates the soil, encouraging seedling growth.
- *Broadcast Seeding and Drill Seeding*—Seeding and vegetative planting are methods used to revegetate an area. Broadcast seeding spreads seeds uniformly, by hand or machine, to steep sloped or rocky areas, flat surfaces, and areas with limited access. Drill seeding is performed using a rangeland drill seeder and may not be used on rocky surfaces. Drill seeding is more suitably performed on flat, nonrocky surfaces, where the machine can insert seeds into the soil.
- *Willow Cutting Establishment*—Willow cutting establishment describes a method of soil stabilization useful for stream banks and other areas located adjacent to water. Similar to biotechnical stabilization, willow cuttings are used to promote growth in an area needing stabilization. Willow cuttings are typically used to reinforce a streambank or other moist area. Willow cuttings require a great deal of moisture and must be planted in areas that remain moist for long periods in order to take hold and grow.

6. Capping. In some cases, the elimination of a pollution source through capping contaminant sources may be the most cost effective control measure for discharges from inactive mineral mining and processing operations. Depending on the type of management practices chosen, the cost to eliminate the pollutant source may be very high. Once completed, however, maintenance costs will range from low to nonexistent.

Capping or sealing of waste materials is designed to prevent infiltration, as well as to limit contact between discharges and potential sources of contamination. Ultimately, capping should reduce or eliminate the contaminants in discharges. In addition, by reducing infiltration, the potential for seepage and leachate generation may also be lessened.

The use of this practice depends on the level of control desired, the materials available, and cost considerations. Many common liners may be effective including common soil, clay, and/or synthetic liners. Generally, soil liners will provide appreciable control for the lowest cost. Synthetic or clay liners may be appropriate to cover materials known to have a significant potential to impact water quality.

4. Storm Water Pollution Prevention Plan Requirements

Specific requirements for a pollution prevention plan for mineral mining and processing facilities are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

Under the description of potential pollution services, each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows and mine pumpout. This assessment of storm water pollution will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Plans must describe the following elements:

The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in storm water runoff[102] and process wastewater discharges, surface water bodies (including wetlands), places where significant materials[103] are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of today's proposed permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal, haul roads, access roads, and rail spurs. In addition, the site map must also identify monitoring locations.

Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the effective date of today's proposed permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is

[100] "Performance of Current Sediment Control Measures at Maryland Construction Sites," January 1990, Metropolitan Washington Council of Governments, page X.

[101] "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990, page IV–4.

[102] Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

[103] Significant materials include, "* * * but [are] not limited to: Raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under section 101(14) of CERCLA; any chemical facilities required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge." (40 CFR 122.26(b)(12)) Significant materials commonly found at mining facilities include: Overburden; raw materials; waste rock piles; tailings; petroleum based products; solvents and detergents; and manufactured products, waste materials or by-products used or created by the facility.

discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

The description of potential pollution sources culminates in a narrative assessment of the risk potential that those sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: Loading and unloading operations; outdoor storage activities; outdoor processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids, total dissolved solids, etc.) associated with each source.

Under the measures and controls section of the pollution prevention plan, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. The permittee must assess the applicability of the following BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, sediment control and collection mechanisms, vegetation/soil stabilization, and capping of contaminated sources. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

Under the preventive maintenance requirements of the pollution prevention plan, permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. The maintenance program requires periodic removal of debris from discharge diversions and conveyance systems. These activities should be conducted in the spring, after snowmelt, and during the fall season. Permittees already controlling their storm water runoff frequently use impoundments or sedimentation ponds. Maintenance schedules for these ponds must be provided in the pollution prevention plant.

Under the inspection requirements of the pollution prevention plan, operators of active facilities are required to conduct quarterly visual inspections of BMPs. Temporary and permanently inactive operations are required to perform annual inspections. Active sites have more frequent inspections than inactive sites because members of the pollution prevention team will be onsite, and the fact that they are active means there is a greater potential for pollution. The inspections shall include: (1) An assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures; (2) visual inspections of vegetative BMPs, serrated slopes, and benched slopes to determine if soil erosion has occurred; and (3) visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff event. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

EPA believes that this quick and simple description will allow the permittee to assess the effectiveness of his/her plan on a regular basis at very little cost. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or followup procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by facility staff. This hands-on inspection will also enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

Under the recordkeeping and internal reporting procedures of the pollution prevention plan, the permittee must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be reported and the date of their corrective action noted.

Under the sediment and erosion control requirements of the pollution prevention plan, permittees must indicate the location and design for proposed BMPs to be implemented prior to land disturbance activities. For sites already disturbed but without BMPs, the permittee must indicate the location and design of BMPs that will be implemented. The permittee is required to indicate plans for grading, contouring, stabilization, and establishment of vegetative cover for all disturbed areas, including road banks. Reclamation activities must continue until final closure notice has been issued.

According to the pollution prevention runoff requirements, the permittee must evaluate the appropriateness of each storm water BMP that diverts, infiltrates, reuses, or otherwise reduces the discharge of contaminated storm water. In addition, the permittee must describe the storm water pollutant source area or activity (i.e., loading and unloading operations, raw material storage piles etc.) to be controlled by each storm water management practice.

a. Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations should be conducted twice a year for active facilities and once a year for temporary and permanently inactive sites. The individual or individuals who will conduct the inspections must be identified in the

plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the expiration of the permit.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

5. Numeric Effluent Limitation

There are no additional requirements under this section other than those stated in the general fact sheet language.

6. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities with mineral mining and processing facilities. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) from when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

As discussed above, EPA does not believe that chemical monitoring is necessary for mineral mining and processing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations, potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites and performed a review of data provided in Part 2 group applications.

7. Alternative Monitoring Requirements

a. EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.J.6.a. of today's permit.

During the period beginning on the effective date and lasting through the expiration date of this permit, all mineral mining and processing facilities will be required to conduct quarterly monitoring for their storm water discharges. Permittees must monitor storm water discharges for total suspended solids (TSS), total dissolved solids (TDS), total phosphorus, pH, and flow. All samples are to be collected as grab samples, rather than flow or time weighted composite samples. These monitoring requirements are summarized in the table below.

TABLE J–5.—MONITORING REQUIREMENTS

Parameter	Unit	Frequency	Sample type
Total Flow	MG	Quarterly	Estimate.
pH	s.u	Quarterly	Grab.
Total Phosphorus	mg/L	Quarterly	Grab.
Total Suspended Solids	mg/L	Quarterly	Grab.
Total Dissolved Solids	mg/L	Quarterly	Grab.

In addition, to the parameters listed in the above table, the permittee shall record the following:

- Date and duration (in hours) of the storm event(s) sampled.
- Rainfall measurements (in inches) of the storm event which generated the sampled runoff.
- Duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.
- Estimate of the total volume (in gallons) of the each discharge sampled.
- Description of the significant materials stored exposed and a list of the best management practices utilized in the drainage area for each discharge sampled.
- Facility status (active, temporarily inactive, permanently inactive, or undergoing reclamation).
- The permittee is required to conduct quarterly monitoring for heavy metals if the permittee suspects that the heavy metal will be in a concentration greater than 10 ppb, or if the parameter is limited in their process wastewater permit.

Monitoring must be conducted at least once in each designated period unless there is insufficient rainfall or snow-melt to produce a runoff event. Sampling shall be conducted in each of the following periods for the purposes of meeting the monitoring requirements of this permit: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

b. Retention of records. The permittee shall retain records of all inspections and monitoring information, including certification reports, noncompliance reports, calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, and supporting data, requested by the permitting authority for at least 3 years after the date that the permit expires.

c. Notice of termination. The permitting authority shall be notified, by the permittee, when discharges authorized under this permit have permanently ceased, reclamation of disturbed areas is complete, and when the conditions of termination have been completed. Termination of coverage under this permit will only be granted when reclamation activities are complete and when storm water discharges do not exceed background values for the indicator pollutants for three consecutive monitoring periods. Where all storm water discharges associated with industrial activity that are authorized by this permit are eliminated, or where the operator of storm water discharges associated with industrial activity at a facility changes, the operator of the facility may submit a Notice of Termination that is signed in accordance with the signatory requirements of this permit.

8. Permitting of Mine Dewatering and Storm Water Discharges

EPA is requesting comments on whether or not facilities should be allowed to submit applications for mine dewatering discharges and storm water discharges under this section of today's permit. EPA will allow combined discharges; however, the discharge must be in compliance with the effluent guideline to which it is subject for mine dewatering. Table J–3 identifies the effluent limitations for mineral mining and processing facilities.

9. Definitions

"Overburden" means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally occurring surface materials that are not disturbed by mining operations.

"Overflow" means a precipitation induced overflow of a facility that is designed, constructed, and maintained to contain, or treat, the volume of wastewater which would result from 10-year, 24-hour precipitation event.

10. Region-specific Permit Conditions

Addendum G of today's proposed permit contains the following additional provisions for mineral mining and processing facilities located in Region VI (the States of Louisiana, New Mexico, Oklahoma, and Texas).

Section 301 of the CWA prohibits issuance of a permit authorizing discharges subject to a national effluent guideline unless limitations based applicable guidelines are included. In order to offer permit coverage for mine dewatering discharges at Construction Sand and Gravel, Industrial Sand, and Crushed Stone mines, the following numeric limits have been developed. EPA Region VI is proposing to allow such discharges under this permit, provided the discharge is composed of storm water or ground water seepage and does not contain process waste water. Inclusion of these numeric limitations allows eligible facilities to obtain coverage for all storm water discharges from the facilities under one permit, rather than having to obtain coverage under an individual permit for mine dewater discharges subject to effluent guidelines. In deciding to offer this permitting option, Region VI considered the administrative burden of issuing individual permits and the nature of pollutants contained in mine dewatering discharges from these three types of mines.

a. *Limitations for storm water discharges associated with industrial activity composed of mine dewatering of construction sand and gravel, industrial sand, and crushed stone mines.* The following limitations apply only to mine dewatering discharges composed entirely of storm water or ground water seepage, and not commingled with any process waste water.

TABLE J–6

Effluent characteristics	Effluent limitations (mg/L)	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Total Suspended Solids (TSS)	45 mg/L	25 mg/l.
pH	Within the range 6.0 to 9.0	Within the range 6.0 to 9.0.

Any untreated overflow from facilities designed, constructed, and operated to treat the volume of storm water (including ground water seepage) associated with a 10-year, 24-hour rainfall event is not subject to these limitations. Compliance with effluent limitations established on the basis of promulgated BPT guidelines was required in July 1980. Permittees in the Construction Sand Gravel and Crushed Stone subcategories must comply with the limitations for TSS as expeditiously as practicable, but in no event later than three years from the date of permit issuance.

The effluent limitations for mine dewatering of storm water in the draft

permits can be achieved by the technologies discussed above. The technologies used to reduce suspended solids are well developed, widely accepted and include practices such as settling basins (which may be incorporated into the mine itself as a sump area), filtration, and control of mine run-on, through the use of berms or trenches to route surface runoff away from the mine.

The timing of mine dewatering discharges (as opposed to surface runoff) is typically at the discretion of the operator, and thus allows the operator the opportunity to allow natural settling of suspended solids even if no active clarification technology is employed. The limitations for pH are based on best practicable control technology currently available (BPT) for mine dewatering at 40 CFR 436.22(a)(2), 436.32(a)(2), and 436.42(a)(2). The effluent limitations for TSS have been adopted from the BPT guidelines for mine dewatering for the Industrial Sand Subcategory (40 CFR 436.42(a)(2). The TSS limitations have also been applied to the construction sand and gravel mines and crushed stone mines on a Best Professional Judgement (BPJ) basis as a technology-based limitation to protect receiving water quality. Note that this permit does not authorize the discharge of process-generated wastewater and therefore the mine dewatering discharges subject to the permit would be composed of storm water and ground water seepage only.

The original economic analysis for construction of the basic technology was done when the BPT requirements for the national effluent guidelines (40 CFR 436) were published on July 12, 1977 (42 FR 35843). In some cases, storm water removed from the mine may be in compliance with the effluent limitations without treatment of the runoff (e.g., the operator allows settling to occur within the mine prior to discharge or the storm water that collects in the mine is naturally low in suspended solids). In these cases, the operator of the discharge would not have a control cost.

The following description of mine dewatering is summarized from Mineral Mining and Processing Point Source Category at 40 CFR part 436. A more complete description of mine drainage associated with storm water runoff can be found in the "Development Document for Interim Final Effluent Limitations Guidelines and New Source Performance Standards for the Minerals for the Construction Industry, Volume 1, Mineral Mining and Processing Industry Point Source Category" (EPA–440/1–75/059), EPA, October 1975.)

As defined at 40 CFR 436.21 (Crushed Stone Subcategory), 436.31 (Construction Sand and Gravel Subcategory), and 436.41 (Industrial Sand Subcategory), the term "mine dewatering" includes any water that is impounded or collects in the mine and is pumped, drained, or otherwise removed from the mine though the efforts of the mine operator. For the Construction Sand and Gravel and Industrial Sand Subcategories, the term includes wet pit overflows caused solely by direct rainfall and ground water seepage. However, if a mine is also used for the treatment of process generated waste water, all three subcategories require the commingled storm water and process waste water be treated as process waste water, subject to the applicable effluent guidelines for process waste water. With regard to mine dewatering, today's permit only authorizes the discharge of storm water and ground water that has collected in the mine.

b. Monitoring and reporting requirements for storm water discharges associated with industrial activity composed of mine dewatering of construction sand and gravel, industrial sand, and crushed stone mines. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at mineral mining and processing facilities (other than mine dewatering discharges at Construction Sand and Gravel, Industrial Sand, and Crushed Stone mines). Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required. The visual inspection of storm water outfalls shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

As discussed above, EPA does not believe that chemical monitoring is necessary for mineral mining and processing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. However, in order to insure compliance with numeric limitations, mine dewatering discharges at Construction Sand and

Gravel, Industrial Sand, and Crushed Stone mines subject to numeric limitations described above will be required to monitor mine dewatering discharges once per quarter. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in part 2 group applications.

TABLE J–7.—MONITORING REQUIREMENTS FOR CRUSHED STONE, CONSTRUCTION SAND AND GRAVEL, AND INDUSTRIAL SAND MINE DEWATERING DISCHARGES

Parameter	Unit	Frequency	Sample type
Total Flow	MG	Quarterly	Estimate.
pH	s.u.	Quarterly	Grab.
Total Suspended Solids	mg/L	Quarterly	Grab.

K. Storm Water Discharges Associated With Industrial Activity From Hazardous Waste Treatment, Storage, or Disposal Facilities

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharge associated with industrial activity." This definition includes point source discharges of storm water from 11 categories of facilities, including "* * * (iv) hazardous waste treatment, storage, or disposal facilities, including those that are operating under Subtitle C of RCRA * * *." Part XI.K. of today's proposed permit only covers storm water discharges from facilities that treat, store, or dispose of hazardous wastes.

This section is not applicable to any unpermitted discharges of non-storm water other than those listed in Part VI.B.1. (Prohibition of Non-storm Water Discharges) of this fact sheet.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

Some industrial facilities that generate hazardous waste have onsite capacity to store, treat, and even dispose of their waste. Many hazardous waste generators, however, send their waste offsite to a TSDF. Generators of hazardous waste must arrange for a transporter who has obtained an EPA ID number to transport the generator's waste to a designated facility (i.e., a facility that is permitted under RCRA to receive and treat, store, or dispose of hazardous waste).

Once wastes are accepted by the TSDF, any number of activities may follow. For example, some wastes are disposed without any intervening storage or treatment, while other wastes are held in storage prior to treatment or disposal. Hazardous wastes are generally stored in containers and tanks, which are enclosed by a bermed area to prevent any releases to the environment from the storage units.

The processes for treating hazardous wastes can be divided into two major categories based on whether the waste is organic or inorganic in nature. Organic wastes are treated by destructive technologies, like incineration, whereas inorganic wastes are treated using fixation technologies, like stabilization, in which the hazardous constituents are immobilized in the residual matrix. Residuals from fixation processes are usually land-disposed and the stabilized constituents are much less likely to leach into the environment.

As mentioned above, some wastes are treated prior to disposal while others are disposed as-generated. Hazardous waste disposal units include landfills, surface impoundments, waste piles, and land treatment units. Wastes are also disposed by being burned in incinerators. Some liquid hazardous wastes are underground-injected into deep wells regulated under the Underground Injection Control (UIC) program in 40 CFR parts 144 to 148. The RCRA regulations governing the different types of hazardous waste treatment, storage, and disposal units are located in 40 CFR part 264, subparts I through O and subpart W.

Hazardous wastes are also recycled at TSDFs. Recycling is considered a form of treatment, however, the recycling process itself is not generally regulated under RCRA. Recycling activities include reclamation, regeneration, reuse, burning for energy or materials recovery, and use in a manner constituting disposal (i.e., land application of hazardous waste or products containing hazardous waste).

2. Pollutants in Storm Water Discharges Associated With Hazardous Waste Treatment, Storage, or Disposal Facilities

Given the diversity and amount of hazardous wastes handled at TSDFs, pollutants in storm water discharges may vary considerably. Contaminated storm water discharges may result from precipitation coming in contact with spills or leaks of hazardous waste. TSDFs regulated under RCRA Subtitle C, however, are required to control much of their storm water runoff through secondary containment (e.g., secondary containment for tank systems; 40 CFR 264.193). When a spill of a listed hazardous waste occurs, for example, the spilled material and any storm water that comes into contact with the material is a hazardous waste under RCRA and must be cleaned up and managed in accordance with all applicable regulations.

In addition to the types of hazardous materials handled and the procedures for controlling runoff at a particular TSDF, several other factors influence to what extent significant materials from these types of facilities and processing operations can affect water quality. Such factors include: Hydrology/geology; volume of wastes handled; extent of industrial activities at a TSDF (i.e., only storage, or storage plus treatment and disposal); and type, duration, and intensity of precipitation

events. These and other factors will interact to influence the quantity and quality of storm water runoff. In addition, sources of pollutants other than storm water, such as illicit connections,[104] spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Pollutants in storm water discharges from TSDFs may consist of, in the case of spills or leaks which are not properly contained or cleaned up, hazardous wastes and/or their constituents. 40 CFR part 261 subpart D contains the lists of hazardous wastes, and Appendix VII to part 261 is a list of the hazardous constituents for which each of these wastes is listed.

Storm water discharges from TSDFs may also contain significant concentrations of the conventional pollutants. Table K–1 indicates the sampling data results analyzed for conventional pollutants from part 2 data submitted to EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. As Table K–1 indicates, large variations in the minimum and maximum values were often found for each of the eight conventional pollutants monitored. For example:

- Grab samples of COD range from 12 mg/L to 500 mg/L.
- Grab samples of oil and grease range from 0 mg/L to 74 mg/L.

TABLE K–1.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i]

[In mg/L unless otherwise indicated]

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample Type	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	8	9	17.8	9.4	3.0	0.0	45.0	45.0	11.5	7.0	45.0	45.0	45.0	45.0
COD	7	8	117.4	48.9	12.0	10.0	500.0	131.0	41.0	34.0	500.0	131.0	500.0	131.0
Nitrate+Nitrite Nitrogen	9	9	0.5	0.4	0.2	0.1	0.8	0.7	0.5	0.3	0.8	0.7	0.8	0.7
Total Kjeldahl Nitrogen	9	9	1.4	1.1	0.5	0.3	0.3	3.9	1.3	0.9	3.0	3.9	3.0	3.9
Oil and Grease	8	N/A	9.3	N/A	0.0	N/A	74.0	N/A	0.0	N/A	74.0	N/A	74.0	N/A
pH (s.u.)	7	N/A	N/A	N/A	5.6	N/A	7.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	8	9	0.2	0.1	0.0	0.0	1.6	0.3	0.1	0.1	1.6	0.3	1.6	0.3
Total Suspended Solids	8	9	139	83	4	5	1100	504	128	32	1100	504	1100	504

[i] Mean, Maximum, Minimum, Median, and Percentiles include all detects and nondetects.
[ii] The number of samples reported included only those samples that were not reported as a nondetect or at the detection limit of the methodology.
[iii] Composite samples.

3. Pollutant Control Measures Required Through Other EPA Programs

As part of the RCRA program, 40 CFR part 264 sets standards for treatment, storage and disposal facilities. EPA realizes that some of the conditions of this section are already addressed by the requirements set forth in part 264. Under the RCRA program, for example, secondary containment is required for tank systems in order to prevent the release of hazardous waste or hazardous constituents to the environment. Such secondary containment must either be capable of preventing storm water runon from entering the system, or have the capacity to contain the volume of the tank plus precipitation from a 25-year, 24-hour rainfall event (40 CFR 264.193).

Conditions such as those set forth for secondary containment at TSDFs are pertinent because they may overlap with aspects of the pollution prevention plan (PPP) required as part of this section. Therefore, in developing a storm water pollution prevention plan, a TSDF must include as Best Management Practices (BMPs) any controls relevant to storm water that have already been implemented under 40 CFR Part 264. To comply with the storm water pollution prevention plan, when the two programs address the same requirement, permittees must meet the more stringent of the two conditions, and incorporate such conditions into the plan.

Other areas where RCRA requirements may overlap with the conditions set forth in this section include inspections and employee training. Daily and weekly inspections of tank systems and containers are required, respectively, under part 264. Therefore, these inspections will be incorporated into the pollution prevention plan for this storm water permit. Similarly, employee training, required under 40 CFR 264.16, does not need to be repeated as part of implementation of the pollution prevention plan, but rather expanded as necessary to include issues concerning storm water management.

4. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology (BCT)]. The Agency does not believe that it is feasible to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from hazardous waste treatment, storage, and disposal facilities to meet BAT/BCT standards of the Clean Water Act. Instead, this section establishes requirements for the development and implementation of site-specific storm water pollution prevention plans consisting of a set of Best Management Practices (BMPs) that are sufficiently flexible to address different sources of pollutants at different sites.

Generally, BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover

[104] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining and processing facilities is low yet it still may be applicable at some operations.

and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with hazardous waste treatment, storage, or disposal facilities that are not already addressed by RCRA subtitle C.

Facilities covered under this section must already be in compliance with the standards for operating a hazardous waste treatment, storage, or disposal facility as established by 40 CFR part 264. As discussed in greater detail in the previous section (Pollutant Control Measures Required Through Other EPA Programs), EPA believes that because of the requirements previously imposed on hazardous waste treatment, storage, or disposal facilities, storm water BMPs are already employed at most TSDFs. This belief is supported by part 1 group application data, which indicated that 97 percent of the representative sampling facilities already have SPCC plans in place at their sites.

Because of the potential for spills of hazardous materials during loading and unloading operations, and the absence of an individual discussion of these operations in 40 CFR part 264, Table K–2 is provided to identify BMPs associated with these activities at hazardous waste treatment, storage, or disposal facilities.

TABLE K–2.—GENERAL LOADING AND UNLOADING STORM WATER BMPS FOR HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES

Activity	Best management practices (BMPs)
Outdoor Unloading and Loading.	Confine loading/unloading activities to a designated area. Consider performing loading/unloading activities indoors or in a covered area. Consider covering loading/unloading area with permanent cover (e.g., roofs) or temporary cover (e.g., tarps). Close storm drains during loading/unloading activities in surrounding areas. Avoid loading/unloading materials in the rain. Inspect the unloading/loading areas to detect problems before they occur. Inspect all containers prior to loading/unloading of any raw or spent materials. Consider berming, curbing, or diking loading/unloading area. Use dry clean-up methods instead of washing the areas down. Train employees on proper loading/unloading techniques.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991 through December 31,1992.

EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

5. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from hazardous waste treatment, storage, or disposal facilities. The requirements included in the pollution prevention plans provide a flexible framework for the development and implementation of site-specific controls to minimize the pollutants in storm water discharges. This flexibility is necessary because each facility is unique in that the source, type, and volume of contaminated storm water discharge will vary from site to site.

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

The pollution prevention plan requirement reflects EPA's decision to allow hazardous waste treatment, storage, or disposal facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The pollution prevention plan requirements in this section are consistent with EPA's storm water general permits finalized on September 9, 1992 (57 FR 41236), and September 25, 1992 (57 FR 44438), for discharges in nonauthorized NPDES States.

As previously discussed, many of the storm water pollution prevention plan requirements discussed in this section of today's proposed permit and fact sheet are already addressed by the RCRA program and employed at hazardous waste treatment, storage, or disposal facilities. To comply with the storm water pollution prevention plan, when the two programs address the same requirement, permittees must meet the more stringent of the two conditions, and incorporate such conditions into the plan. Please note that if RCRA does not address a particular condition which is stipulated in the storm water pollution prevention plan, the facility still must comply with that requirement of the plan.

6. Numeric Effluent Limitations

There are no additional requirements under this section other than those stated in Part V of the permit.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that treatment, storage, or disposal facilities (TSDFs) may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires TSDFs to collect and analyze samples of their storm water discharges for the pollutants listed in Table K–3. The pollutants listed in Table K–3 were found to be above benchmark levels for a significant portion of TSDFs that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from TSDFs, EPA is

requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from TSDFs must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table K–3. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE K–3.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Ammonia	0.093 mg/L
Total Kjeldahl Nitrogen (TKN).	1.5 mg/L
Total Recoverable Magnesium.	Detection limit.
Chemical Oxygen Demand (COD).	65 mg/L
Arsenic	0.000018 mg/L
Total Recoverable Barium.	1.0 mg/L
Total Recoverable Cadmium.	0.0018 mg/L
Cyanide	Detection limit.
Total Recoverable Lead.	0.0337 mg/L
Mercury	0.0024 mg/L
Total Recoverable Selenium.	0.02 mg/L
Total Recoverable Silver.	0.0009 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table K–3, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table K–3, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE K–4.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table K–3, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table K–3, then no further sampling is required for that parameter.
4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table K–3. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.B. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharges before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and

management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at TSDFs. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from hazardous waste treatment, storage, or disposal facilities (TSDFs). These notices specifically require that facilities with storm water discharges that are associated with TSDFs are required to monitor their storm water discharges for ammonia, magnesium, magnesium (dissolved), TKN, COD, TDS, TOC, oil and grease, pH, arsenic, barium, cadmium, chromium, cyanide, lead, mercury, selenium, silver, and WET. Today's proposed permit contains different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for TSDFs in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.K.7. of today's proposed permit.

a. Semiannual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, facilities identified in paragraph 8.a.(1) must monitor those storm water discharges identified below at least semiannually (2 times per year). Permittees with facilities identified in Parts XI.K.8.i. (below) must report in accordance with Part VI.B. (Reporting: Where to Submit) and paragraph XI.K.8.c. (Reporting: When to Submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

(1) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA are required to conduct semiannual monitoring for the following parameters:

- Ammonia
- Total Recoverable Magnesium
- Magnesium (dissolved)
- Total Kjeldahl Nitrogen
- COD
- TDS
- TOC
- Oil and Grease
- pH
- Total Recoverable Arsenic
- Total Recoverable Barium
- Total Recoverable Cadmium
- Total Recoverable Chromium
- Total Cyanide
- Total Recoverable Lead
- Total Mercury
- Total Recoverable Selenium
- Total Recoverable Silver
- Acute Whole Effluent Toxicity.

b. Sample type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for a grab sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab

sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Reporting: when to submit. (1) Permittees that are required to conduct sampling pursuant to Part 6.a. shall monitor samples collected during the sampling periods running from January to June and during the sampling period from July to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than 12 months of information.

9. Region-specific Conditions

Region VI does not anticipate allowing coverage for Hazardous Waste Treatment Storage or Disposal Facilities (TSDF) in the permits issued by EPA Region VI for Louisiana (LAR05*###), New Mexico (NMR05*###), Oklahoma (OKR05*###), Texas (TXR05*###), and Indian Lands in these States (LAR05*##F, NMR05*##F, OKR05*##F, or TXR05*##F).

L. Storm Water Discharges Associated With Industrial Activity From Landfills and Land Application Sites

This section of today's proposed permit addresses special requirements for storm water discharges associated with industrial activity from landfill and land application sites. Pursuant to 40 CFR 122.26, storm water discharges from landfills, land application sites, and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of the Resource Conservation and Recovery Act (RCRA), are required to seek permit coverage. Under this section, industrial waste is defined as waste generated by any of the industrial activities described at 40 CFR 122.26(b)(14).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

Special conditions contained in this section apply to land disposal sites that meet the definition of a landfill under RCRA Subtitle D contained at 40 CFR part 257, which establishes criteria for the classification of solid waste disposal facilities and practices. Part 257 defines landfills as areas of land or excavation in which wastes are placed for permanent disposal, and that are not land application units, surface impoundments, injection wells, or waste piles. Included in this definition are municipal solid waste landfills (MSWLFs) and industrial solid nonhazardous waste landfills. (Many of the 1,410 landfill facilities participating in the group application process are classified as MSWLFs). Therefore, the special conditions in this section apply to both MSWLFs and industrial landfills as defined under part 257. This section also applies to industrial waste land application sites. Land application sites are defined as facilities at which wastes are applied onto or incorporated into the soil surface for the purpose of beneficial use or waste treatment and disposal. No open dumps were included in the facilities participating in the group application process (open dumps are defined as solid waste disposal units not in compliance with State/Federal criteria established under RCRA Subtitle D) and operation of an open dump is prohibited under RCRA Section 4004. Therefore, storm water discharges from open dumps are not addressed by this section.

The following sections describe industrial and municipal solid waste landfills and industrial waste land application sites.

a. Municipal solid waste landfills. In 1988, EPA estimated that there were approximately 9,300 MSWLFs in the U.S. The wastes which are disposed of in MSWLF landfills are highly variable. Examples include household waste (including household hazardous waste which is excluded from RCRA hazardous waste regulation), nonhazardous incinerator ashes, commercial wastes, yard wastes, tires, white goods, construction wastes, municipal and industrial sludges, asbestos, and other industrial wastes. Only a small percentage of all wastes disposed of in MSWLFs are industrial wastes. In 1988, EPA's Report to Congress on solid waste generation indicated that nearly 90 percent of wastes disposed of in all MSWLFs were household or commercial (office) wastes. Industrial process wastes represented only 2.73 percent of the total wastestream (although most MSWLFs currently or have previously accepted industrial wastes and are therefore subject to storm water permitting requirements). The Report also indicated that about half of the total number of MSWLFs received small quantity generator hazardous wastes. In addition, MSWLFs that operated prior to the implementation of RCRA hazardous waste management requirements in 1980 may have received wastes that before that date that would have been classified as hazardous wastes under current RCRA requirements.

A typical MSWLF is a constantly evolving facility which is constructed over its operating life as received wastes are spread, compacted, and covered. Most modern landfills contain one or more separate "units," planned final waste containment areas. Active units continue to receive wastes until they have reached disposal capacity. When capacity is reached, a unit is capped with a final cover, and additional wastes must be placed in other active units. As a result, a landfill may consist of multiple inactive and active units at various stages of completion.

Within each unit, wastes are added in layers referred to as lifts. Received wastes are spread across the working face of the landfill to a depth of six to twenty feet and then compacted. At the end of each working day a thin layer of soil (daily cover) is spread on top of the added wastes and compacted. A large unit may consist of multiple lifts, depending on the planned final depth.

Historically, landfills have been constructed according to one of two generic designs, the trench method and the area method, or a combination of these. The trench method requires the excavation of a trench into which wastes will be placed. Soil from the excavation provides the cover material as disposal continues. In the area method, wastes are placed directly on

the ground surface and disposal follows the natural contours of the land. Some landfills use combinations of the two methods at different times depending on the location of the active unit.

MSWLF construction creates constant changes in the contours of the facility resulting in changing patterns of storm water runon and runoff. Controlling erosion of landfill slopes is among the primary concerns of the landfill operator. Current practices generally include a combination of temporary controls (straw bales, silt fences, etc.), in active disposal areas, and permanent controls (recontouring, revegetation, etc.), in areas where waste disposal has been completed.

Daily and intermediate covers serve primarily to protect against disease vectors and to prevent fires and the blowing of refuse. Typically, daily covers consist of the minimum amount of soil excavated from the site needed to cover exposed wastes in the active areas of the landfill. After spreading, the cover is usually compacted to reduce loss from erosion. Intermediate covers, which are also typically soil excavated from the site, are often applied to areas of a unit which will be inactive for periods of 30 days or more. Deeper than daily covers, intermediate covers may be applied in conjunction with runoff control measures to minimize pooling and high-velocity flow patterns. Both daily and intermediate covers promote infiltration to some extent, depending on depth and soil material.

When a landfill (or landfill unit) has reached disposal capacity, a final cover is applied. Final covers generally provide a relatively impermeable cap over which topsoil is placed and vegetation is established. Permanent runoff controls (diversion channels, recontouring, terracing, etc.) may be constructed to minimize erosion and ponding. Final cover materials in older landfills, which are generally subject to limited regulatory requirements, often consist of a single layer of natural soils. However, at newer landfills subject to more stringent regulatory requirements, other cover materials (polymers, sand and gravel, sewage sludge, etc.) are frequently combined with soil in multiple layers.[105]

b. Industrial landfills. Industrial landfills only receive wastes from industrial facilities such as factories, processing plants, and manufacturing sites. These facilities may also receive hazardous wastes from very small quantity hazardous waste generators (less than 100 kilograms per month), as defined in RCRA Subtitle C. Included in these waste streams are some PCB-contaminated wastes. The Toxic Substances Control Act PCB disposal regulations allow limited categories of PCB materials to be disposed of in RCRA Subtitle D landfills.[106] In 1988, EPA estimated that there were at least 3,511 industrial Subtitle D landfills (this would presumably be the maximum number of non-MSWLF facilities regulated by the storm water program). The specific number of these units that are onsite and offsite facilities (i.e., centralized waste management units) was not available. Because wastes generated by industrial facilities vary considerably, both between and within industries, the wastes disposed of at industrial landfills can be highly variable. For example, the industrial nonhazardous waste category includes wastes from the pulp and paper industry, the organic chemical industry, the textile manufacturing industry, and a variety of other industries. Consequently, these waste streams may vary in chemical composition and/or physical form. Most industrial landfills are privately owned.[107]

Currently, there are limited data available on industrial landfills. Specific industrial waste streams have not been well characterized and little is known about the hazards they may pose. Limited data are also available regarding the design, operation, and location of these facilities. It has been documented, however, that there has been only sporadic application of design and operating controls at industrial landfills. In 1988, only about 12 percent of industrial landfills (including both onsite and offsite facilities) had any type of liner, and fewer than 35 percent employed runon/runoff controls.[108] The use of these controls (including runon and runoff controls) at industrial waste landfills is likely to increase as State industrial waste programs continue to evolve.

c. Land application sites. In 1988, EPA estimated that there were approximately 5,605 land application sites in the U.S. These sites receive wastes (primarily wastewaters and sludges) from facilities in virtually every major industrial category. More than half of all land application sites cover less than 50 acres and receive less than 50 tons of waste annually. The largest number of active land application sites in 1988 were observed in the food and kindred products industry, however the pulp and paper industry managed the largest gross quantity of waste using this practice. Similar to landfills, the variability in types of waste that are land applied precludes any general characterization of the materials that may be exposed to storm water. Typically, individual land applications will only dispose of wastes with specific characteristics. However, the criteria for selection are site-specific depending on type of process used and the soil characteristics. Waste application techniques are dependent on waste characteristics.

In 1988, EPA found that 68.5 percent of all industrial waste land application units had runon and runoff controls. No information was available on the extent of closure requirements applicable to land application units.

2. Potential Pollutant Sources at Landfill and Land Application Sites

a. Landfills. At landfill sites, runoff carrying suspended sediments and commingling of runoff with uncontrolled leachate are the two primary sources of pollutants that this section is intended to address. Other potential sources of pollutants at landfills, those from ancillary areas of the landfill and which are not directly associated with landfill activities (i.e., vehicle maintenance, truck washing, composting, transfer station activities, etc.) may be subject to requirements in other sections of today's proposed permit.

(1) Total suspended solids. Storm water discharges from landfill sites often contain high TSS levels because of the extensive land disturbance activities associated with landfill operations. Suspended solids can adversely affect fisheries by covering the bottom of a stream or lake with a blanket of material that destroys the fish food bottom fauna or spawning grounds. In addition, while they remain in suspension, suspended solids can increase turbidity, reduce light penetration, and impair the photosynthetic activity of aquatic plants.[109] Specific sources of TSS loadings from landfill operations and typical Best Management Practices (BMPs) used to control TSS levels in storm water runoff are shown in Table L–1. The listed BMPs are consistent with the BMPs identified in part 1 of the permit applications submitted by landfill group applicants.

[105] "Report to Congress: Solid Waste Disposal in the United States," Vol. II, Office of Solid Waste and Emergency Response, Oct. 1988.

[106] Ibid.

[107] Ibid.

[108] Ibid.

[109] EPA. 1974 (October). "Development Document for the Effluent Limitations Guidelines and New Source Performance Standards for the Steam Electric Power Point Source Category."

TABLE L–1.—SOURCES OF TSS LOADINGS AND TYPICAL BMPS USED FOR EROSION CONTROL AT LANDFILLS

Potential pollutant sources	BMPs
Erosion from:	
• Exposed soil from excavating cells/trenches.	
• Exposed stockpiles of cover materials.	
• Inactive cells with final cover but not yet finally stabilized.	
• Daily or intermediate cover placed on cells or trenches.	Stabilize soils with temporary seeding, mulching, and geotextiles; leave vegetative filter strips along streams. Implement structural controls such as dikes, swales, silt fences, filter berms, sediment traps and ponds, outlet protection, pipe slope drains, check dams, and terraces to convey runoff, to divert storm water flows away from areas susceptible to erosion, and to prevent sediments from entering water bodies. Frequently inspect all stabilization and structural erosion control measures and perform all necessary maintenance and repairs.
• Erosion from haul roads (including vehicle tracking of sediments).	Stabilize haul roads and entrances to landfill with gravel or stone. Construct vegetated swales along road. Clean wheels and body of trucks or other equipment as necessary to minimize sediment tracking (but contain any wash waters [process wastewaters]). Frequently inspect all stabilization and structural erosion control measures and perform all necessary maintenance and repairs.

Landfill group applicants were required to submit storm water sampling data under part 2 of their group applications. There were a total of 1,410 facilities in the landfill group applications. Part 2 data revealed that TSS concentrations were extremely variable. Statistically summarized part 2 data indicated a wide range of TSS concentrations ranging from 0 mg/L to 39,900 mg/L for grab samples, with a mean of 2,976 mg/L. For statistically summarized part 2 composite samples, the concentrations ranged between 0 mg/L and 18,220 mg/L, with a mean of 1,850 mg/L. Additional part 2 data fell within the ranges, and generally below the mean concentrations, that are stated above.

(2) Other pollutants. Table L–2 presents potential sources of other pollutants in storm water discharges from landfill operations. The specific pollutants associated with each of these sources are highly variable, depending upon individual site operations and waste types received. Table L–2 also lists BMPs that would be expected to be used in these areas to minimize potential pollutant loadings. Several of these BMPs were identified in the group permit applications submitted by landfill operators.

TABLE L–2.—SOURCES AND BMP CONTROLS OF POTENTIAL POLLUTANTS (OTHER THAN TSS)

Potential pollutant source	BMPs
Application of fertilizers, pesticides, and herbicides.	Observe all applicable Federal, State, and local regulations when using these products. Strictly follow recommended application rates and methods (i.e., do not apply in excess of vegetative requirements). Have materials such as absorbent pads easily accessible to clean up spills.
Exposure of chemical material storage areas to precipitation (including pesticides, fertilizers, and herbicides).	Provide barriers such as dikes to contain spills. Provide cover for outside storage areas. Have materials such as absorbent pads easily accessible to clean up spills.
Exposure of waste at open face	Minimize the area of exposed open face as much as is practicable. Divert flows around open face using structural measures such as dikes, berms, swales, and pipe slope drains. Frequently inspect erosion and sedimentation controls.
Waste tracking onsite and haul roads, solids transport on wheels and exterior of trucks or other equipment (common with incinerator ash).	Clean wheels and exterior of trucks or other equipment as necessary to minimize waste tracking (but contain any wash waters [process wastewaters]).
Uncontrolled leachate (commingling of leachate with runoff or runon).	Frequently inspect leachate collection system and landfill for leachate leaks. Maintain landfill cover and vegetation. Maintain leachate collection system.

Table L–3 summarizes the group applicant data that was analyzed for the seven conventional and nonconventional pollutants (other than TSS) required to be sampled for by all landfills submitting part 2 data. Similar to the results for TSS described above, these data indicate that there was great variability in pollutant concentrations at the various landfills. Generally, pollutant concentrations for BOD_5, COD, Nitrate plus Nitrite Nitrogen, TKN, and pH exhibit variability with the minimum and maximum reported concentrations, often ranging over several orders of magnitude. As shown in Table L–3, the concentrations of these constituents are generally low in comparison to discharges from other sectors. Elevated levels of these pollutants would not be anticipated in runoff from waste management units unless there was direct contact with waste materials and/or commingling with leachate. Additional part 2 information received is generally consistent with the values reported below.

TABLE L–3.—SUMMARY OF LANDFILL/LAND APPLICATION SITE STORM WATER DATA (EXCEPT TSS)

Parameter	Data summary	
	Grab samples	Composite samples
BOD_5	78% of BOD levels 10 mg/L or less	73% of BOD levels 10 mg/L or less.
COD	78% of COD levels less than 100 mg/L	77% of COD levels less than 100 mg/L.
Nitrate plus Nitrite Nitrogen	71% of nitrate plus nitrogen levels one mg/L or less	65% of nitrate plus nitrogen levels less than 1 mg/L.
Nitrogen, Total Kjeldahl	74% of TKN levels less than 2 mg/L	85% of TKN levels less than 2 mg/L.
Oil and Grease	83% of Oil and Grease levels 5 mg/L or less	Not Applicable.
pH	96% of pH levels between 6.49 and 8.88	96% of pH levels between 6.49 and 8.88.
Total Phosphorus	85% of phosphorus levels less than 2 mg/L	75% of phosphorus levels less than 2 mg/L.

Only two groups submitted sampling for toxic pollutants expected to be present in their storm water discharges. Data were submitted for five facilities. These data are evaluated and summarized in Table L–4. While the data suggest that some toxic pollutants could be present (at highly variable levels) in storm water discharges from landfills, the amount of data is inadequate to be considered representative of storm water discharges from landfill sites. In addition, there is little or no additional data available from other sources to characterize the levels of toxic pollutants in discharges of runoff from industrial and municipal solid waste landfills. Additional part 2 data for toxic pollutants were within the grab sample ranges listed in Table L–4.

TABLE L–4.—SUMMARY OF TOXIC POLLUTANT GRAB SAMPLING DATA

[Data submitted by only two groups]

Parameter	Grab samples				Composite samples			
	Number of groups	Number of sites	Number of outfalls	Range (mg/L)	Number of groups	Number of sites	Number of outfalls	Range (mg/L)
Ammonia	1	4	7	.4–160	1	2	3	.17–.29
Arsenic	2	4	4	.006–9.49	1	2	3	.05–.09
Barium	2	4	7	.065–2.14	1	2	3	.21–.32
Cadmium	1	1	1	0.845	1	1	1	0
Chromium	1	4	6	.006–.204	0	0	0	N/A
Iron	2	5	8	.036–210	1	2	3	49.6–90.5
Lead	1	4	6	.079–83.7	1	2	3	.02
Mercury	2	4	5	.0002–51.5	0	0	0	N/A
Selenium	1	3	4	.005–16.5	0	0	0	N/A
Silver	1	1	1	.006	0	0	0	N/A
TOC	2	5	7	.54–128	0	0	0	N/A

b. Land application sites. At land application sites, TSS would also be expected to be found at elevated levels in storm water discharges (because of the extensive soil disturbance). The occurrence and levels of other pollutants in storm water discharges are dependent on the types of wastes applied and facility design and operation (including use of storm water management/treatment practices. No part 2 data for TSS or any other pollutants was submitted for land application sites nor was such data available from other sources.

There are no Federal criteria for industrial landfill or land application unit design, operation, closure or post-closure care. State programs that address industrial landfills and land application sites vary considerably. As noted above, only 35 percent of all industrial landfills currently have runon/runoff controls. However, many are subject to closure requirements.

3. Pollutant Control Measures Required by Other EPA Programs

EPA recognizes that requirements under other Federal and State programs currently address reclamation/closure of and storm water management at landfill and land application sites. In developing requirements under this section, the Agency has considered how these other program requirements affect the characteristics of storm water discharges (e.g., by limiting contact with potential pollutant sources). Of specific note are recently imposed RCRA criteria at 40 CFR parts 257 and 258 that address the design, operation, and closure of MSWLFs. These regulations are summarized below.

Regulations at 40 CFR part 257 classify solid waste disposal facilities and practices. Regulations at 40 CFR part 258 establish criteria for municipal solid waste landfills. The types of criteria required include: location restrictions, operating criteria, design criteria, ground water monitoring and corrective action, closure and postclosure care, and financial assurance criteria. All States must implement the Federal MSWLF criteria primarily through State solid waste management plans.

As part of the operating criteria, part 258 requires that all discrete units within MSWLFs receiving waste provide for the following by October 1993 (it should be noted that EPA has proposed an extension of this deadline to April 1994):

(a) Owners or operators of all MSWLF units must design, construct, and maintain:

(1) A runon control system to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm:

(2) A runoff control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm event.

In addition, all MSWLF units that received wastes after October 1991 are required to meet specific closure standards (see 40 CFR 258.60). These standards include installation of a final cover consisting of a minimum of 6 inches of topsoil over a minimum of 18 inches of clay. The cover must be no more permeable than the unit's liner.

The criteria also imply, but do not explicitly require, that revegetation should be performed.

These criteria indicate that for all but the most severe storm events (i.e., greater than the 24-hour, 25-year storm event), new units within MSWLFs will be required to separate storm water discharges from active and inactive areas. (Active areas are defined as those that have not yet received a final cover [as required under 258.60].) Further, the closure/final cover criteria described above are intended to prevent contact with waste materials and minimize erosion.

4. Options for Controlling Pollutants

a. Overview of section requirements. This section establishes separate requirements for municipal solid waste landfills (MSWLFs) and industrial landfills. These requirements are discussed below.

(*1*) *MSWLFs.* The Agency believes that the MSWLF criteria in 40 CFR 258.60 will effectively separate runoff from active and inactive areas at newer landfills. As a result, separate requirements have been established for active and inactive areas at MSWLF sites.

For discharges from active landfill areas, the Agency believes that there is reasonable potential for runoff to contact waste materials. In these areas, runoff may also become commingled with leachate. In fact, a significant percentage of landfill facilities that submitted group applications, identified leachate and wastes as "exposed materials." The nature of exposed waste materials as well as the extensive data available for leachate characteristics suggest that the composition of runoff from MSWLFs will be highly site-specific. Existing data (see RCRA docket materials for the development and implementation of the 40 CFR part 258 criteria) show a wide range of inorganic and organic pollutants can be found in landfill leachate. In addition, total suspended solids (TSS) levels are also likely to be elevated where contact occurs with wastes, disturbed areas, and daily/intermediate cover materials.

At this time, the Agency does not believe that there are sufficient data available to establish numeric limits based on best available technology for storm water discharges from active MSWLF areas. The data submitted in the part 2 applications, as well as leachate data from available literature, suggest that a variety of constituents may be present at levels that are highly site-specific depending on the types and extent of contact with exposed wastes and extent of commingling with leachate. Furthermore, the volumes of runoff generated will be dependent on the frequency and intensity of precipitation events. For TSS, little or no data are available to characterize the TSS levels in active landfill area runoff and to assess the performance of treatment technologies/best management practices currently in use.

Therefore, in this section, EPA is requiring that landfill operators develop storm water pollution prevention plans. For active landfill areas, these plans should be tailored toward minimizing contact of storm water with waste materials. The plans should also include design and implementation of best management practices and/or treatment methods to control the pollutants likely to be found in runoff at the site. For the active portion of the landfill, this section also requires quarterly monitoring for TSS and semiannual monitoring for other pollutants (see below) to determine pollutant loadings and quantify the performance of BMPs/treatment measures. These data may be used in the future in the development of individual and/or general permits to establish numeric limitations based on best available technology. It should also be noted that EPA is currently in the process of developing effluent limitation guidelines for discharges of leachate from waste management facilities (including MSWLFs). Where these effluent guidelines apply to discharges from active areas, facilities will be required to comply with these requirements on the effective date.

For units/areas that ceased receiving wastes after October 1991, EPA believes that closure criteria under 40 CFR 258.60 will minimize or eliminate pollutant loadings from waste materials to storm water. For MSWLF units closed in accordance with these criteria, TSS should be the only pollutant of concern. Again, EPA does not believe that adequate data are currently available to establish a numeric limitation based on best available technology (BAT) for TSS in storm water discharges from inactive areas. TSS concentrations in untreated storm water discharges have not been sufficiently well characterized to address the site-specific variability arising from local geology and topography along with individual cover materials and reclamation practices. Furthermore, the available data do not support an assessment of the relative performance of specific BMPs/treatment measures. Therefore, for inactive areas that were closed in accordance with 40 CFR 258.60 criteria, this section requires operators to include in their pollution prevention plans specific measures to control TSS in discharges. TSS monitoring will be required to provide additional data on loadings and to evaluate the effectiveness of specific control measures.

The Agency is uncertain whether all MSWLF units which ceased receiving wastes prior to October 1991 will have been closed in such a manner to ensure long term stability and minimize the potential for runoff to contact wastes and leachate. Therefore, operators of units that were closed prior to October 1991 are required to conduct the same monitoring as required for active areas. This monitoring is intended to evaluate the integrity and performance of final cover materials in minimizing pollutant loadings to storm water discharges. Based on the results of this monitoring, the permitting authority may elect to continue/modify or terminate the required monitoring, provide for additional permit conditions (including specific BMPs and/or numeric limitations), or terminate coverage under the permit, as appropriate.

An exception from most monitoring requirements is provided for older landfill areas closed prior to October 1991 in accordance with State requirements that meet or exceed the final cover criteria in 40 CFR 258.60. Similar to newer units, TSS should be the only pollutant of concern at these sites and only quarterly TSS monitoring is required.

(*2*) *Industrial landfills.* As discussed above, minimal data are available to characterize storm water discharges or management practices for industrial solid waste landfills. EPA recognizes that onsite landfills are likely to be dedicated waste management units. However, the 1988 Report to Congress indicates that these onsite units can be found at sites in virtually every major industrial category. Offsite landfills can receive industrial wastes from almost any sources. Further, there are no current or planned Federal minimum requirements for runon/runoff control and closure of these onsite and offsite facilities. As a result, existing State programs vary. Some States have extensive permitting and design standard requirements for industrial landfills, often for specific waste types. In contrast, other States have much more limited industrial solid waste programs.

Because of the variability between sites, the need for representative runoff characterization data, and the lack of information on BMP/treatment method performance, this section does not establish effluent limitations for storm water discharges from industrial landfills. At this time, best available technology shall consist of development

and implementation of pollution prevention plans. In addition, to ensure protection of water quality, the Agency has established monitoring requirements based on the concern that runoff from industrial landfills may contact waste materials and/or leachate. The monitoring requirements for active MSWLF areas are based on existing leachate characterization data which show the potential for virtually all priority pollutants to be present. Since this is also likely to be true for industrial landfills, similar monitoring requirements (including toxicity testing) are being required for industrial landfills.

(3) *Land application sites.* This section includes the same requirements for land application sites as for industrial landfills (as described above). The Agency does not currently have sufficient data to identify specific pollutants common to land application sites and develop numeric limitations. Therefore, the Agency believes that requiring implementation of pollution prevention plans along with a broad range of monitoring requirements is appropriate.

5. Storm Water Pollution Prevention Plans Requirements

The requirements for storm water pollution prevention plans under this section build upon the requirements included in EPA's storm water general permit published on September 9 and 25, 1992 (57 FR 41236 and 57 FR 44438). As such, the following discussion focuses on the plan requirements that are specific to landfills and land application sites. The rationale for the common requirements applicable to all types of facilities covered under today's proposed permit (including landfills) is provided in Part VI of this fact sheet.

a. Description of potential pollutant sources. The first step in preventing pollution of storm water from landfills is to identify potential sources of storm water contamination. Consequently, EPA is requiring that landfill and land application site operators include, in their pollution prevention plan, a narrative description of activities at their facilities. The Agency is also requiring landfill permittees to identify on a site map the locations of active and closed cells or trenches, any known leachate springs or other areas where leachate may commingle with runoff, the locations of any leachate collection and handling systems, and the locations of stockpiles of landfill cover material. The Agency is requiring land application site permittees to identify on their site maps the locations of active and inactive land application areas and the types of wastes applied in those areas, any known leachate springs or other areas where leachate may commingle with runoff, the locations of any leachate collection and handling systems, and the locations of temporary waste storage areas. EPA believes these requirements will, in the event contamination is detected in storm water, facilitate the identification of any source of contamination.

EPA is also requiring owners or operators to summarize all available sampling data for storm water and leachate generated at the site because the Agency believes these data will help to determine whether storm water is commingling with any leachate produced at the site. Finally, operators must identify any current NPDES-permitted discharges at their sites.

b. Measures and controls. EPA is requiring good housekeeping practices for materials storage areas exposed to precipitation and for vehicle tracking of sediment and waste. EPA believes good housekeeping practices provide a simple and inexpensive means of controlling pollutants from entering storm water and therefore will not be overly burdensome to regulated facilities.

EPA believes that frequent and thorough inspections are necessary to ensure adequate functioning of: sediment and erosion controls, leachate collection systems, intermediate and final covers, and significant materials storage containers. Failure of any of the aforementioned items could cause contamination of storm water with sediment, leachate, or significant materials stored onsite. EPA believes it is necessary to conduct inspections both during storm events and during dry weather. Inspections during dry periods allow facilities to identify and address any problems prior to a storm event, thereby minimizing the chance for storm water contamination. Inspections during significant storm events ensure that measures are functioning as originally intended and provide an opportunity for facilities to observe what materials and/or activities are exposed to storm water. Pollution prevention plans must address the specific inspection requirements for active and inactive landfills and land application sites described in Part XI.L.3.a.(3).(d) of today's proposed permit.

Failures of significant materials storage containers, leachate collection and treatment systems, cover materials, and sedimentation and erosion controls can result in storm water contamination. EPA believes it is necessary to maintain these items in good working order to prevent storm water contamination. Consequently, EPA is requiring (in pollution prevention plans) that owners or operators ensure the maintenance of material storage areas to prevent leaking or rupture and all elements of leachate collection and treatment systems to prevent commingling of leachate with storm water. Pollution prevention plans must also describe measures to be taken to protect the integrity and effectiveness of any intermediate and final covers.

Analyzed part 2 data submitted by landfill group applicants demonstrate elevated TSS concentrations (mean TSS grab sample concentration of 3,360 mg/L) in storm water discharges. EPA believes controls are needed to reduce potential TSS contamination of storm water and to reduce suspended solids which have been carried by storm water before the discharge leaves the site. Therefore, EPA has chosen to require that pollution prevention plans address both stabilization and structural controls to reduce potential TSS loadings to surface waters.

Monitoring and Reporting Requirements

Analytical monitoring requirements. EPA believes that landfill/land application sites may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires landfill/land application sites (except those that are closed in accordance with 40 CFR 256.60) to collect and analyze samples of their storm water discharges for the pollutants listed in Table L–5. The pollutants listed in Table L–5 were found to be above benchmark levels for a significant portion of landfill/land application sites that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at levels of concern from landfill/land application sites, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from landfill/land

application sites must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table L–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE L–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Total Suspended Solids (TSS)[i]	100
Total Phosphorus[ii]	0.33
Total Recoverable Iron[ii]	0.3
Total Recoverable Lead[ii]	0.0337

[i] Applicable to all landfill and land application sites.
[ii] Applicable to all facilities except MSWLF areas closed in accordance with 40 CFR 258.60 requirements.

If the average concentration for a parameter is less than or equal to the value listed in Table L–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table L–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE L–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table L–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table L–5, then no further sampling is required for that parameter.
4th Year of Permit Coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table L–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table L–5 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table L–5. Facilities that achieve average discharge concentrations which are less than or equal to the values in Table L–5 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then

where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of a storm water discharge from each outfall are required at landfills and land application sites. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from landfills and land application sites. These notices specifically require that facilities with storm water discharges that are associated with landfills and land application sites are required to monitor their storm water discharges for ammonia, magnesium, magnesium (dissolved), TKN, COD, TDS, TOC, oils and grease, pH, arsenic, barium, cadmium, chromium, total cyanide, lead (total), mercury, iron, selenium, and silver. Today's proposed permit contains slightly different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for landfills and land application sites facilities in the September 1992 General Permits and those required in today's proposed permit.

TSS monitoring is being required at all landfill and land application sites because available sampling data as well as the nature of these operations (significant land disturbance) indicate that TSS is likely to be present at elevated levels (greater than 500 mg/L) in storm water discharges. This monitoring requirement will provide a measure to determine the effectiveness of the pollution prevention plans, particularly BMPs, in controlling erosion and to further assess potential impacts on receiving water quality.

Monitoring is being required for other parameters (except at sites closed in compliance with 40 CFR 258.60) that could be present in storm water discharges from landfills and land application facilities at individual sites where leachate commingles with runoff and/or contacts waste materials. This monitoring will allow EPA to determine whether prohibited commingling of leachate is occurring. Further, as noted previously, exposed materials and potential storm water pollutants (other than TSS) are highly site-specific because they depend upon current and past waste and materials management practices. Therefore, the required monitoring will allow the permitting authority to define and control specific pollutant sources at individual landfills.

Many of the required monitoring parameters, other than TSS, are similar to the parameters addressed by the ground water monitoring requirements for municipal solid waste landfills established under subtitle D of RCRA (see October 9, 1991 (56 FR 50978)) and are the same as the monitoring required under the storm water general permit published on September 9 and 25, 1992 (57 FR 41236 and 57 FR 44438). Based on landfill leachate data reviewed by EPA, monitoring for these parameters should indicate whether leachate is commingling with storm water and/or contamination is resulting from direct contact with waste materials.[110] [111]

[110] "Landfill Leachate: A Survey of Chemical and Toxicity Characteristics and Evaluations of Receiving Stream Biological Impacts," Draft. West Virginia Department of Natural Resources, 1987.

[111] "Leachate Baseline Report: Determination of Municipal Landfill Leachate Characteristics," NUS Corporation, prepared for EPA. Date unknown.

Other parameters, such as total phosphorus, total aluminum, and total iron, also must be monitored because the median values for the industry are greater than levels of concern. The levels of concern are established from the most stringent storm water effluent limitations, Gold Book values, or NURP medians. The median values for these parameters, as submitted in part 2 of the applications, are: 0.50 mg/L; 9.49 mg/L; 0.840 mg/L; and 25.0 mg/L, respectively.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.L.6 of today's proposed permit.

a. Quarterly monitoring requirement. During the period beginning on the effective date and lasting through the expiration date of this permit, all permittees under this section must conduct quarterly monitoring for total suspended solids in all storm water discharges authorized by this section. Permittees must report in accordance with Part VI.B. of the permit (Reporting: Where to Submit) and paragraph XI.L.7.d. (Reporting: When to Submit). In addition, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

b. Semiannual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with landfill and land application units identified in paragraphs XI.L.7.b.(1) through XI.L.7.b.(4) must monitor all storm water discharges from those sites at least semiannually (twice per year) for the following parameters, except as provided in VI.E.7. (Sampling Waiver), VI.E.6. (Representative Discharge), and XI.L.7. (Toxicity Testing). The permittees sample for the following parameters:

- pH
- Magnesium (total recoverable and dissolved)
- Total Kjeldahl nitrogen
- Chemical oxygen demand
- Total dissolved solids
- Total organic carbon
- Oil and grease
- Total recoverable arsenic
- Total recoverable barium
- Total recoverable cadmium
- Total recoverable chromium
- Total recoverable cyanide
- Total recoverable lead
- Total recoverable mercury
- Total recoverable selenium
- Total recoverable silver
- Acute whole effluent toxicity

Landfill facilities which receive sewage sludge must also monitor semiannually for fecal coliform.

In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) All active disposal areas at municipal solid waste landfills. Active areas are defined as those areas that have not yet received a final cover.

(2) All inactive MSWLF areas that ceased receiving wastes before October 1991, unless these areas were closed in accordance with the closure/final cover requirements at 40 CFR 258.60.

(3) All active and inactive areas at industrial solid waste landfills.

(4) All areas where wastes have been applied at active and inactive land application sites.

c. Sample type. For all required monitoring, data shall be reported for grab samples.

d. Reporting: when to submit. Permittees shall collect quarterly samples during the sampling periods running from January to March, April to June, July to September, and October to December. Permittees that are required to conduct sampling pursuant to Part XI.L.5.b., shall collect semiannual samples during the sampling periods running from January to June and July to December. Permittees shall annually submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than 12 months of information.

e. Toxicity Testing—*(1)* Test Procedures. *(a)* The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater bodies. Due to the nonsaline nature of rainwater, freshwater should also be used for discharges to estuarine, marine, or other naturally saline waterbodies.

(b) All test organisms, procedures, and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA/600/4–90–027, or the most current edition. The control water used will be moderately hard water as described in EPA/600/4–90–027, Table 6, or the most current edition.

(c.) Tests shall be conducted annually (once per year) on a grab sample of the discharge. Test shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–027 (or the most current edition), Section 12, Report Preparation, and the report submitted to EPA with the Discharge Monitoring Reports (DMRs). On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(2) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected in the storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the sources of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

M. Storm Water Discharges Associated With Industrial Activity From Automobile Salvage Yards

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from eleven categories of facilities, including "* * * battery reclaimers, salvage yards, and automobile recyclers, including but limited to those classified as Standard Industrial Classification 5015 * * *."

This section establishes special conditions for the storm water discharges associated with industrial activities at automobile salvage yards. Storm water discharges covered by this section are discharges where precipitation and storm water runon come into contact with significant materials including, but are not limited

to parts storage and cleaning, storage of junked vehicles, waste products, by-products, stored materials, fuels, and areas used for dismantling operations. This includes storm water discharges from access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility. Washwaters from vehicle, equipment, and parts cleaning areas are process wastewaters. Discharges of process wastewater or discharges subject to process wastewater effluent limitation guidelines are not eligible for coverage under this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

This section has been developed for storm water discharges associated with activities related to dismantling of used motor vehicles for the purpose of selling parts. As stated above, category (vi) of the definition of storm water discharges associated with industrial activity includes facilities primarily engaged in the wholesale or retail distribution of used motor vehicle parts and classified as SIC code 5015. Dismantlers are a major source for replacement parts for motor vehicles in service.

The following description summarizes operations that might occur at a typical automobile dismantling facility. The primary activity involves the dismantling or wrecking of used motor vehicles. Some facilities, however, perform vehicle maintenance and may rebuild vehicles for resale.

Typically, automobile dismantling facilities receive vehicles that are either uneconomical to run or wrecks that are uneconomical to repair. The nature of operations generally depends on the size and location of the facility. In urban areas where land is more valuable, vehicles are typically dismantled upon arrival, parts are segregated, cleaned, and stored. Remaining hulks are generally sold to scrap dealers rather than stored onsite due to limited space. In more rural areas, discarded vehicles are typically stored on the lot and parts removed as necessary. Remaining hulks are sold to scrap dealers less frequently.

Once a used vehicle is brought to the site, fluids may be drained and the tires, gas tank, radiator, engine and seats may be removed. The dismantler may separate and clean parts. Such cleaning may include steam cleaning of the engine and transmission as well as the use of solvents to remove oil and grease and other residues. Usable parts are then inventoried and stored for resale. The remaining car and/or truck bodies are stored onsite for future sale of the sheet metal and glass. Stripped vehicles and parts that have no resale value are typically crushed and sold to a steel scrapper. Some operations may, however, convert used vehicles and parts into steel scrap as a secondary operation. This is accomplished by incineration, shearing (bale shearer), shredding, or baling.

According to the 1987 census, 6,075 establishments reported SIC code 5015 as their primary SIC code, although some estimates indicate that there may be as many as 11,000 to 12,000 of these facilities.[112] Vehicle wreckers and dismantlers are generally small, privately owned businesses. Most facilities employ 10 or fewer employees and derive the majority of their profits from the sale of usable parts. Only a small percentage of this universe consists of large establishments with fleets of trucks, cranes, mobile balers and computers to maintain inventories of parts.[113]

Table M–1 below lists potential pollutant sources from activities that commonly take place at automobile salvage yards.

TABLE M–1.—COMMON POLLUTANT SOURCES

Activity	Pollutant source	Pollutants
Vehicle Dismantling	Oil, anti-freeze, batteries, gasoline, diesel fuel, hydraulic fluids.	Oil and grease, ethylene glycol, heavy metals.
Used Parts Storage	Batteries, chrome bumpers, wheel balance weights, tires, rims, filters, radiators, catalytic converters, engine blocks, hub caps, doors, drivelines, galvanized metals, mufflers.	Sulfuric acid, galvanized metals, heavy metals, petroleum hydrocarbons, suspended solids.
Outdoor Vehicle and Equipment Storage.	Leaking engines, chipping/corroding bumpers, chipping paint, galvanized metal.	Oil and grease, arsenic, organics, heavy metals, TSS.
Vehicle and Equipment Maintenance.	Parts cleaning	Chlorinated solvents, oil and grease, heavy metals, acid/alkaline wastes.
	Waste disposal of greasy rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluids, radiator fluids, degreasers.	Oil, heavy metals, chlorinated solvents, acid/alkaline wastes oil, heavy metals, chlorinated solvents, acid/alkaline wastes, ethylene glycol.
	Spills of oil, degreasers, hydraulic fluids, transmission fluid, and radiator fluids.	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol.
	Fluids replacement, including oil, hydraulic fluids, transmission fluid, and radiator fluids.	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol.
Vehicle, Equipment, and Parts Washing Areas.	Washing and steam cleaning waters	Oil and grease, detergents, heavy metals; chlorinated solvents, phosphorus, salts, suspended solids.

[112] "The Automobile Scrap Processing Industry," Howard Ness, P.E., 1984.

[113] Ibid.

TABLE M–1.—COMMON POLLUTANT SOURCES—Continued

Activity	Pollutant source	Pollutants
Liquid Storage in Above Ground Storage Tanks.	External corrosion and structural failure	Fuel, oil and grease, heavy metals, materials being stored.
	Installation problems	Fuel, oil and grease, heavy metals, materials being stored.
	Spills and overfills due to operator error	Fuel, oil and grease, heavy metals, materials being stored.
Illicit Connection to Storm Sewer.	Process wastewater	Dependent on operations.
	Sanitary water	Bacteria, biochemical oxygen demand (BOD), suspended solids.
	Floor drain	Oil and grease, heavy metals, chlorinated solvents, fuel, ethylene glycol.
	Vehicle washwaters	Oil and grease, detergents, metals, chlorinated solvents, phosphorus, suspended solids.
	Radiator flushing wastewater	Ethylene glycol.
	Leaking underground storage tanks	Materials stored or previously stored.

Sources:
NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.
Alabama Department of Environmental Management. September 30, 1992. "Best Management Plan for Automobile Salvage Yards—Final Report."
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Refinishing Industry." EPA/625/7–91/016.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Repair Industry." EPA/625/7–91/013.
EPA, Office of Research and Development. May 1992. "Facilities Pollution Prevention Guide." EPA/600/R–92/088.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

2. Pollutants in Storm Water Discharges Associated With Automobile Salvage Yards

Impacts caused by storm water discharges from automobile salvage yards will vary. Several factors influence to what extent operations at the site can affect water quality. Such factors include: geographic location; hydrogeology; the types of industrial activity occurring outside (e.g., dismantling, vehicle and parts storage, or steam cleaning); the size of the operation; and the type, duration, and intensity of precipitation events. Each of these, and other factors, will interact to influence the quantity and quality of storm water runoff. For example, outdoor storage of leaking engine blocks may be a significant source of pollutants at some facilities, while dismantling operations is the primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,[114] spills, and other improperly dumped materials, may increase the pollutant loading discharged into waters of the United States.

EPA has identified the storm water pollutants and sources resulting from various automobile salvage yard activities in Table M–1. Table M–1 identifies oil, heavy metals, acids, and ethylene glycol as some of the parameters of concern at automobile salvage yards.

Part 2 group application data that was statistically summarized indicated, large variations in the minimum and maximum values were found for each of the eight conventional pollutants monitored:

- Grab sample values for total suspended solids ranged from 0 mg/L to 2300 mg/L respectively, and flow-weighted composite sample values ranged from 7.0 mg/L to 8565 mg/L.
- Chemical oxygen demand (COD) grab samples at monitoring facilities ranged from 12 mg/L to 1660 mg/L
- Oil and grease samples at sampling facilities ranged from 0 mg/L to 50 mg/L.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. Table M–2 indicates the sampling results for all data statistically summarized by EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. Part 2 data which has not undergone statistical analysis is generally consistent with the values reported in Table M–2.

TABLE M–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[1]

[In mg/L unless otherwise indicated]

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	13	28	7.15	12.61	2.00	1.00	16.00	62.00	6.00	6.50	16.00	48.00	16.00	62.00
COD	30	13	135.00	66.23	12.00	34.00	1660.00	155.00	61.00	60.00	250.00	155.00	1660.00	155.00
Nitrate + Nitrite Nitrogen	13	30	1.70	1.62	0.17	0.09	5.65	5.23	0.83	1.32	5.65	4.87	5.65	5.23

[114] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any number of sources including improper connections, dumping or spills from industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at used motor vehicle parts facilities is low yet it may be applicable at some operations.

TABLE M–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i]—Continued

[In mg/L unless otherwise indicated]

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Total Kjeldahl Nitrogen	13	30	2.17	2.27	0.84	0.04	4.87	8.80	1.90	1.76	4.87	8.63	4.87	8.80
Oil & Grease	31	N/A	5.35	N/A	0.00	N/A	50.00	N/A	3.0	N/A	32.00	N/A	50.00	N/A
pH (s.u)	29	N/A	N/A	N/A	6.40	N/A	8.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	13	22	0.19	3.05	0.01	0.01	1.08	45.00	0.05	0.26	1.08	15.70	1.08	45.00
Total Suspended Solids	13	30	474.38	839.07	0.0	7.00	2300.00	8565.00	183.00	226.00	2300.00	5100.00	2300.00	8565.00

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

TABLE M–3.—STORM WATER BMPS FOR AUTOMOBILE SALVAGE YARDS

Activity	BMPs
Dismantling and vehicle maintenance	Drain all fluids from vehicles upon arrival at the site. Segregate the fluids and properly store or dispose of them.
	Maintain an organized inventory of materials used in the maintenance shop.
	Keep waste streams separate (e.g., waste oil and mineral spirits). Nonhazardous substances that are contaminated with a hazardous substance is considered a hazardous substance.
	Recycle anti-freeze, gasoline, used oil, mineral spirits, and solvents.
	Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.
	Label and track the recycling of waste material (e.g., used oil, spent solvents, batteries).
	Drain oil filters before disposal or recycling.
	Store cracked batteries in a nonleaking secondary container.
	Promptly transfer used fluids to the proper container. Do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
	Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
	Plug floor drains that are connected to the storm or sanitary sewer. If necessary, install a sump that is pumped regularly.
Dismantling and vehicle maintenance	Inspect the maintenance area regularly for proper implementation of control measures.
	Filtering storm water discharges with devices such as oil water separators.
	Train employees on proper waste control and disposal procedures.
Outdoor vehicle, equipment, and parts storage	Use drip pans under all vehicles and equipment waiting for maintenance and during maintenance.
	Store batteries on impervious surfaces. Curb, dike or berm this area.
	Confine storage of parts, equipment and vehicles to designated areas.
	Cover all storage areas with a permanent cover (e.g., roofs) or temporary cover (e.g., canvas tarps).
	Install curbing, berms or dikes around storage areas.
	Inspect the storage yard for filling drip pans and other problems regularly.
	Train employees on procedures for storage and inspection items.
Vehicle, equipment and parts washing areas	Avoid washing parts or equipment outside.
	Use phosphate-free biodegradable detergents.
	Consider using detergent-based or water-based cleaning systems in place of organic solvent degreasers.
	Designate an area for cleaning activities.
	Contain steam cleaning washwaters or discharge under an applicable NPDES permit.
	Ensure that washwaters drain well.
	Inspect cleaning area regularly.
	Install curbing, berms or dikes around cleaning areas.
	Train employees on proper washing procedures.
Liquid storage in above ground containers	Maintain good integrity of all storage containers.
	Install safeguards (such as diking or berming) against accidental releases at the storage area.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
Liquid storage in above ground containers	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Improper connection with storm sewers	Plug all floor drains if it is unknown whether the connection is to storm sewer or sanitary sewer systems. Alternatively, install a sump that is pumped regularly.
	Perform dye testing to determine if interconnections exist between sanitary water system and storm sewer system.
	Update facility schematics to accurately reflect all plumbing connections.
	Install a safeguard against vehicle washwaters and parts cleaning waters entering the storm sewer unless permitted.
	Maintain and inspect the integrity of all underground storage tanks; replace when necessary.
	Train employees on proper disposal practices for all materials.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.

EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Refinishing Industry." EPA/625/7–91/0.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Repair Industry." EPA/625/7–91/013.
EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.
Minnesota Technical Assistance Program. September 1988. "Waste minimization—Auto Salvage Yards."

A number of facilities reported nondetects or values below detection limits: Nine facilities reported nondetects for oil and grease grab samples; one sampling facility reported a value below the detection limit for total suspended solids in a grab sample; and seven facilities reported nondetects for total phosphorus composite samples.

The condition of vehicles and the activities that occur at automobile salvage yards frequently result in significant losses of fluids which release toxic metals, oil and grease and polychlorinated aromatic hydrocarbons to storm water runoff. In addition, the weathering of plated and nonplated metal surfaces (e.g., bumpers) may contribute toxic metals to storm water runoff. The selection of pollutant parameters for continued monitoring are based upon the nature of automobile salvage yard activities, exposed materials at these sites, and a review of the data submitted for part 2 of the group application process. The following is a discussion of pollutants associated with the industrial activity of automobile salvage yards:

- *Total Suspended Solids (TSS)*—Permittees are required to sample for TSS because salvage yards are typically sparsely vegetated or have a low percentage of impervious land areas and, therefore, are unstabilized. Total suspended solids in storm water discharges from automobile salvage yards will primarily consist of inorganic materials such as sand, silt, and clay. Because suspended solids increase the turbidity of water, less light is able to penetrate the water, reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish. The part 2 data statistically summarized showed a wide range of minimum and maximum TSS values (0.0 mg/L to 2,300 mg/L for grab samples and 7 mg/L to 8,565 mg/L for flow-weighted composite samples).
- *Oil and Grease*—There are several sources of oil and grease at automobile salvage yards. Typically these sources include: Dismantling activities; vehicle and equipment maintenance; outdoor storage of vehicles, equipment and parts; and cleaning operations. Oil and grease emulsions are also detrimental to aquatic organisms and inhabitants because: (1) Deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowl. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines. Statistically summarized part 2 data indicated a wide range of minimum and maximum oil and grease values from 0.0 mg/L to 50 mg/L. Additional part 2 data revealed a higher maximum value for oil and grease.
- *pH*—The pH level is easily measured and is an indication of potential environmental impacts. Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change. Statistically summarized part 2 data indicated that pH varies from a minimum of 6.4 to a high of 8.3.
- *Chemical Oxygen Demand (COD)*—COD measures the total amount of oxygen necessary for oxidation. The statistically summarized part 2 indicated a wide range in the 30 grab sample values from 12 mg/L to 1,660 mg/L, while the 13 composite samples varied from 34 mg/L to 155 mg/L. The higher COD levels may be attributed to the presence of biologically resistant organics, such as oil and grease. Further supporting EPA's belief that COD is a pollutant of concern at automobile salvage yards, a review of additional part 2 data revealed grab and composite sample values above the mean and median concentrations listed in Table M–2.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology (BCT)]. The Agency does not believe that it is appropriate to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from automobile salvage yard operations to meet the BAT/BCT standards of the Clean Water Act. Because of the diversity of operations at automobile salvage yards and the lack of sufficient storm water water quality data currently available to EPA, establishing numeric effluent limitations is not feasible at this time. Rather, this section establishes requirements for the development and implementation of a site-specific storm water pollution prevention plan consisting of a set of Best Management Practices that are sufficiently flexible to address different sources of pollutants at different sites.

Best Management Practices (BMPs) are implemented to prevent and/or eliminate pollutants in storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges from automobile salvage yards is through exposure minimization practices. Exposure minimization practices minimize the potential for storm water to come in contact with pollutants. These BMP methods are generally uncomplicated and inexpensive practices. They are easy to implement, and require little or no maintenance. In some instances, more resources intensive BMPs, including detention ponds or filtering devices, may be necessary depending on the type of discharge, types and concentrations of contaminants, and volume of flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: Facility size, climate, geographic location, geology/hydrology and the environmental

setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with automobile salvage yards.

Part 1 group application data indicate that BMPs have not been widely implemented at the representative sampling facilities. Less than 5 percent of the sampling subgroup list indoor storage as a material management practice. Less than 8 percent of the representative sampling facilities use covering at their storage areas. Less than 3 percent of the representative facilities utilize waste minimization practices. The most commonly listed (approximately 20 percent) material management practice is draining fluids from vehicles prior to storage. Because BMPs described in part 1 data are limited, Table M–3 is provided to identify BMPs associated with activities that may be employed at automobile salvage yards.

4. Pollutant Control Measures Required Through Other EPA Programs

Because hazardous substances including oil, gasoline, and lead are commonly found at automobile salvage yards, such facilities may be subject to other State or Federal environmental protection programs. In particular, as described below, the Resource Conservation and Recovery Act (RCRA) and the Underground Storage Tank (UST) programs require careful management of materials used onsite which decreases the probability that storm water from such areas will be contaminated by these materials.

Under the RCRA program, on September 10, 1992, EPA promulgated standards in 40 CFR part 279 for the management of used oils that are recycled (57 FR 41566). These standards include requirements for used oil generators, transporters, processors/re-refiners, and burners. The standards for used oil generators apply to all generators, regardless of the amount of used oil they generate. Do-it-yourself (DIY) generators which generate used oil from the maintenance of their personal vehicles, however, are not subject to the management standards in 40 CFR 279.20(a)(1)).

The requirements for used oil generators were designed to impose a minimal burden on generators while protecting human health and the environment from the risks associated with managing used oil. Under subpart C of 40 CFR part 279, used oil generators must not store used oil in units other than tanks, containers, or units subject to regulation under 40 CFR parts 264/265 (Section 279.22(a)). In other words, generators may store used oil in tanks or containers that are not subject to Subpart J (hazardous waste tanks) or Subpart I (containers) of 40 CFR parts 264/265, as long as such tanks or containers are maintained in compliance with the used oil management standards. This does not preclude generators from storing used oil in Subpart J tanks or Subpart I containers or other units, such as surface impoundments (Subpart K), that are subject to regulation under 40 CFR part 264 or 265.

Storage units at generator facilities must be maintained in good condition and labeled with the words "used oil." Upon detection of a release of used oil to the environment, a generator must take steps to stop the release, contain the released used oil, and properly manage the released used oil and other materials [40 CFR 279.22 (b) to (d)]. Generators storing used oil in underground storage tanks are subject to the UST regulations in 40 CFR part 280.

If used oil generators ship used oil offsite for recycling, they must use a transporter who has notified EPA and obtained an EPA identification number [40 CFR 279.24].

The technical standards for USTs at 40 CFR part 280 require that new UST systems (defined as systems for which installation commenced after December 12, 1988) use overfill prevention equipment that will: (1) Automatically shut off flow into the tank when the tank is no more than 95 percent full; or (2) alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high level alarm. The preceding requirements do not apply to systems that are filled by transfers of no more than 25 gallons at one time. Existing UST systems (defined as systems for which installation has commenced on or before December 12, 1988) are required to have installed the described overfill prevention equipment by December 12, 1998.

5. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from automobile salvage yards. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as: facility size; climate; geographic location; geology/hydrology; the environmental setting of each facility; and volume and type of discharge generated. This flexibility is necessary because each facility will be unique in that the source, type, and volume of contaminated surface water discharges will differ from site to site.

Under today's proposed general permit, all facilities must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of automobile salvage yards to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provide a flexible framework for the development and implementation of site specific controls to minimize pollutants in storm water discharges. This approach and associated deadlines are consistent with EPA's storm water general permits finalized on September 9, 1992 and September 25, 1992 for discharges in nonauthorized NPDES States (57 FR 41236).

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

Specific requirements for a pollution prevention plan for automobile salvage yards are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

a. Contents of the plan. Storm water pollution prevention plans are intended to aid operators of automobile salvage yards to evaluate all potential pollution sources at a site, and assist in the selection and implementation of appropriate measures designed to prevent, or control, the discharge of pollutants in storm water runoff. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, 1992, (EPA 832–R–92–006) to assist permittees in developing and implementing pollution prevention measures.

(1) Description of potential pollution sources. There are no requirements

beyond those described in Part VI.C.2 of this fact sheet.

(2) Measures and controls. Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. For the following areas at the site, the permittee must assess the applicability of the corresponding BMPs:

• *Vehicle Dismantling and Maintenance Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle dismantling and maintenance. The facility must consider draining and segregating all fluids from vehicles upon arrival at the site, or as soon as feasible thereafter. The facility must consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts fluids prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment. Where dismantling and maintenance activities can not take place indoors, facilities may consider methods for containing oil or other fluid spillage during parts removal. Drip pans, large plastic sheets, or canvas may be considered for placement under vehicles or equipment during maintenance and dismantling activities. Where drip pans are used, they should not be left unattended to prevent accidental spills.

• *Vehicle, Parts, and Equipment Storage Areas*—The storage of vehicles, parts, and equipment must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility must consider the use of drip pans, large sheets of plastic, canvas (or equivalent measures) under vehicles, parts, and equipment. Canvas or sheets of plastic may be used as temporary coverage of storage areas. Indoor storage of vehicles, parts and equipment, as well as the installation of roofs, curbing, berming and diking of these areas must be considered. Large plastic or metal bins with secure lids should be used to store oily parts (e.g., small engine parts). Used batteries should be stored within nonleaking secondary containment or by other equivalent means to prevent leaks of acid into storm water discharges.

• *Material Storage Areas*—As part of a good housekeeping program, consider labelling storage units of all materials (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids). Maintain such containers and units in good condition, so as to prevent contamination of storm water. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility may consider indoor storage of the materials and/or installation of berming and diking of the area.

• *Vehicle, Equipment, and Parts Cleaning Areas*—The plan must describe measures that prevent or minimize contamination of storm water from all areas used for vehicle, equipment, and parts cleaning. The facility must consider performing all cleaning operations indoors. In addition, the facility must consider covering or berming the cleaning operation area. Washwaters from vehicle, equipment, and parts cleaning areas are process wastewaters that are not authorized discharges under this section.

These four areas are sources of pollutants in storm water from automobile salvage yards. EPA believes that the incorporation of BMPs such as those suggested, in conjunction with a pollution prevention plan, will substantially reduce the potential of storm water contamination from these areas. In addition, EPA believes that these requirements continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities.

(a) Preventive Maintenance—Permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. The purpose of the inspections is check on the effectiveness of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist should be considered. The checklist will ensure that all required areas are inspected, as well as help to meet the recordkeeping requirements.

(b) Inspections—This section proposes that in addition to the comprehensive site evaluation required under Part XI.M.3.a. of today's proposed permit, qualified facility personnel shall be identified to inspect: Upon arrival, or as soon as feasible thereafter, all vehicles for leaks; any equipment containing oily parts, hydraulic fluids, or any other fluids, at least quarterly for leaks; and any outdoor storage containers for liquids, including, but not limited to, brake fluid, transmission fluid, radiator water, and anti-freeze, at least quarterly for leaks.

In addition, qualified facility personnel are required to conduct, at a minimum, quarterly visual inspections of BMPs. The inspections shall include: (1) An assessment of the integrity of any flow diversion or source minimization systems; and (2) visual inspections of dismantling areas; outdoor vehicle, equipment, and parts storage area; vehicle and equipment maintenance areas; vehicle, equipment, and parts washing areas; and liquid storage in above ground containers. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections.

The quarterly visual inspections must be made at least once in each of the following designated periods during daylight hours: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff). Records of inspections shall be maintained as part of the plan.

(c) Employee training—Permittees are required to identify annual dates for such training. Employee training must, at a minimum, address the following areas when applicable to a facility: used oil management; spill prevention and response; good housekeeping practices; used battery management; and proper handling (i.e., collection, storage, and disposal) of all fluids. Unlike some industrial operations, the industrial activities associated with automobile salvage yards that may affect storm water quality require the cooperation of all employees, not just one or two people. EPA, therefore, is proposing to require that employee training take place at least annually to serve as: (1) Training for new employees; (2) a refresher course for existing employees; and (3) training for all employees on any storm water pollution prevention techniques recently incorporated into the plan.

(d) Recordkeeping and internal reporting—Permittees must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be reported and the date of their corrective action noted. Employees must report incidents of leaking fluids to facility management

and these reports must be incorporated into the plan.

In addition, the facility must maintain records (gallons per month) of drained waste oil, anti-freeze, and gasoline; identify by name and EPA or State identification number (if any) all transporters, recyclers, and disposal facilities of used waste oil, antifreeze, batteries, scrap and tires; maintain records (gallons per month) of waste oil, anti-freeze, gasoline, freon, batteries, scrap materials, and tires that are sent to recyclers; and maintain records of the number of batteries removed from cars and sold or recycled per month. These materials are all significant sources of pollutants in storm water discharges. By maintaining such records, which for the most part should be readily accessible, the pollution prevention team will be able to more accurately track the potential for these materials to contribute to storm water pollution.

(e) Storm water management—The permittee must evaluate the appropriateness of each storm water BMP that diverts, infiltrates, reuses, or otherwise reduces the discharge of contaminated storm water. In addition, the permittee must describe the storm water pollutant source area or activity (i.e., loading and unloading operations, raw material storage piles etc.) to be controlled by each storm water management practice.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) Confirm the accuracy of the description of potential pollution sources contained in the plan; (2) determine the effectiveness of the plan; and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations should be conducted twice a year for automobile salvage yards. These inspections are intended to be more in depth than the quarterly visual inspections. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

6. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that automobile salvage yards may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires automobile yards to collect and analyze samples of their storm water discharges for the pollutants listed in Table M–4. The pollutants listed in Table M–4 were found to be above benchmark levels for a significant portion of sampling facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from automobile salvage yards, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from automobile salvage yards must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table M–4. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE M–4.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Chemical Oxygen Demand (COD).	65 mg/L.
pH	6 to 9 s.u.
Total Suspended Solids	100 mg/L.
Total Kjeldahl Nitrogen	1.5 mg/L.
Nitrate plus Nitrite as Nitrogen.	0.68 mg/L.

If the average concentration for a parameter is less than or equal to the value listed in Table M–4, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table M–4, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE M–5.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table M–4, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table M–4, then no further sampling is required for that parameter.
4th Year of Permit Coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table M–4. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at automobile salvage yards. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples. The inspections must be of a grab sample collected from each storm water outfall.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

g. Baseline general permit variance. On September 9, 1992, and September

25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring of several parameters for discharges from automobile salvage yard facilities. These notices specifically require that facilities with storm water discharges that are associated with automobile salvage yards are required to monitor their storm water discharges for oil and grease, COD, TSS, and pH. Today's proposed permit contains similar monitoring requirements. There has been a change in the schedule for monitoring. EPA requests comment upon the difference between the monitoring requirements set out for automobile salvage yard facilities in the September 1992 General Permits and those required in today's proposed permit.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.M.6 of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, annual monitoring of storm water discharges associated with industrial activity is required for automobile salvage yards with any of the following: (1) Over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (2) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (3) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water. These facilities must monitor their storm water discharges for Chemical Oxygen Demand (COD); oil and grease; Total Suspended Solids (TSS); pH; and any pollutant limited in an effluent guideline to which the facility is subject.

Permittees must only collect and analyze a grab sample for these parameters. Permittees are not required to submit monitoring results, unless required in writing by the Director. These monitoring requirements are summarized in the table below.

TABLE M–6.—MONITORING REQUIREMENTS

Parameter	Unit	Frequency	Sample type
Total flow	gallons	Annual	estimate.
Chemical oxygen demand	mg/L	Annual	grab.
Oil and grease	mg/L	Annual	grab.
pH	s.u.	Annual	grab.
Total suspended solids	mg/L	Annual	grab.

In addition to the parameters listed in the above table, the permittee shall record the following:

- Date and duration (in hours) of the storm event(s) sampled
- Rainfall measurements (in inches) of the storm event which generated the sampled runoff
- Duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event
- Estimate of the total volume (in gallons) of the each discharge sampled.

b. Quarterly visual examination of storm water quality. (1) Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity from vehicle dismantling areas, vehicle and equipment maintenance areas and parts and equipment cleaning areas. If there are numerous points of discharge from one area, one representative sample may be observed. The examination must be made at least once in each designated period (described in (2) below) during daylight hours unless there is insufficient rainfall or snow melt to produce flow.

(2) Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

(3) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of flow. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information must be maintained onsite and include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

N. Storm Water Discharges Associated With Industrial Activity From Scrap and Waste Material Processing and Recycling Facilities

Specific requirements have been established for those facilities that are engaged in the processing, reclaiming and wholesale distribution of scrap and recyclable waste materials. As background, the storm water regulations define 11 categories of storm water discharges associated with industrial activity in 40 CFR 122.26(b)(14). Category (vi) includes facilities that are engaged in the recycling of materials, including metal scrapyards, battery reclaimers, and salvage yards, including but limited to those classified Standard Industrial Classification (SIC) 5093. For purposes of this section, special conditions have been proposed for those facilities engaged in the reclaiming and retail/wholesale distribution of used motor vehicle parts identified as SIC 5015 in Part XI.M.

SIC 5093 includes establishments engaged in assembling, breaking up, sorting and the wholesale distribution of scrap and recyclable waste materials including bag, bottle and box wastes, fur cuttings, iron and steel scrap, metal and nonferrous metal scrap, oil, plastics, rags, rubber, textiles, waste paper and rag wastes. This section establishes conditions that are also applicable to those activities that are typically associated with SIC 5093 that are engaged in the recycling and/or reclamation of liquid wastes including, but not limited to, used solvents, oil, mineral spirits, and ethylene glycol (antifreeze). This section, including Best Management Practices (BMPs), monitoring requirements, and pollution prevention plan requirements, is organized by facilities that process and

recycle nonliquid wastes versus those that reclaim and recycle liquid wastes. Facilities that participated in U.S. Environmental Protection Agency (EPA) Group Permit Applications 195, 274, 467, 647 (except facilities identified as SIC 4212), 826, 1035, 1145 and 1204 are eligible for coverage under this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Pollutants Found in Storm Water Discharges

This fact sheet is organized into two major subsections, those industrial activities engaged in the processing and recycling of scrap and waste materials (nonliquid recyclable wastes) and those industrial activities engaged in reclaiming and recycling liquid materials, e.g., used oils, solvents, mineral spirits and antifreeze. Industrial operations and BMPs associated with these two groups are largely dissimilar. Therefore, conditions for each of these two groups are identified separately.

a. Scrap and waste recycling facilities (SIC 5093) (nonliquid recyclable wastes). The scrap and waste recycling industry reclaims, processes and provides wholesale distribution of a diversity of materials and products. Typical recyclable materials include ferrous and nonferrous metals, paper, cardboard, glass and plastic. Inbound recyclable materials are processed onsite in order to achieve a uniform grade product that meets a particular manufacturer's specifications. A significant inventory of processing equipment is frequently required to process the recyclable waste material into a uniform grade. Processing equipment typically employ enormous physical forces such as shearing, shredding, and compacting in the process of eventually achieving a desired uniform grade product.

Individual scrap and waste recycling facilities may process one or more types of recyclable materials at a single site. Depending on the requirements of a manufacturer, recyclable waste materials, e.g., paper and cardboard, may need to be stored under cover to prevent deterioration. The bulk size of the recyclable waste materials and the processing equipment associated with these facilities frequently necessitates stockpiling materials and equipment outdoors. Consequently, there is significant opportunity for exposure of storm water runoff to pollutants. The extent of material potentially exposed to storm water runoff is illustrated in the following table based on information provided from one group application consisting of approximately 1100 members.

TABLE N–1.—PERCENTAGE OF APPLICANTS IN ONE GROUP APPLICATION THAT PROVIDE COVER OVER MATERIALS OR PROCESSES

Material/processes	Percent of applicants
Ferrous Materials	8.8
Nonferrous Materials	53
Glass/plastic/paper	14
Other Materials	1.7
Material Processing Equipment	43

There are at least four types of activities that are common to most scrap and waste recycling facilities, they include: scrap waste material stockpiling, material processing, segregating processed materials into uniform grades, and collecting nonrecyclable materials for disposal. This fact sheet outlines pollutants of concern associated with each of these types of activities. Other operations of concern, including vehicle and equipment maintenance, are also discussed in this fact sheet.

(1) *Pollutants associated with material stockpiling.* During material stockpiling, including unloading and loading areas, the potential exists for some types of inbound recyclable materials to deposit residual fluids on the ground. Used automotive engines, radiators, brake fluid reservoirs, transmission housings, and lead-acid from batteries may contain residual fluids that, if not properly managed, can eventually come in contact with storm water runoff. For example, sampling data from two group applications indicated the presence of oil and grease in 103 individual grab samples. In response to other Federal and State environmental regulations, such as the Resource Conservation and Recovery Act (RCRA), many scrap and waste material facilities have instituted inspection and supplier education programs to minimize or eliminate the amount of inbound recyclable materials containing fluids and other potentially hazardous materials prior to their acceptance. Part XI.N.3.c.(1)(a) of today's proposed permit imposes conditions that will make an inbound recyclable materials inspection program part of the pollution prevention plan.

Another concern of outdoor stockpiling, including unloading and loading areas, is associated with deterioration of materials. Metal surfaces that are stockpiled for extended periods may be subject to corrosion. Corrosion is the deterioration of metal surfaces that typically results in the loss of metal to a solution, i.e., water. The following metals are referred to as the galvanic (or electromotive) series and have a tendency to corrode and become soluble in water; magnesium, aluminum, cadmium, zinc, steel or iron, cast iron, chromium, tin, lead, nickel, soft and silver solder, copper, stainless steel, silver, gold, platinum, brass and bronze. For some metals, the extent and rate of corrosion is dependent on

whether it occurs in an oxygen-starved or oxygen-abundant atmosphere.

Corrosion of stockpiled materials at scrap recycling facilities is a potential source of pollutants given that metals such as copper, lead, nickel, zinc, chromium and cadmium were frequently detected in sampling data. In addition, the majority of these metals are associated with recyclable materials handled by the scrap recycling industry. Part XI.N.3.a.(3) of today's proposed permit identifies BMP options to address these sources.

Another significant material of concern is the reclaiming of scrap lead acid batteries from automotive vehicles and equipment. If a battery casing becomes cracked or damaged, special precautions are necessary to ensure that the contents do not come in contact with storm water runoff. This includes battery terminals with visible corrosion. In all cases, used batteries shall be handled and stored in such a manner as to prevent exposure to either precipitation or runoff. Part XI.N.3.a.(3) addresses proposed conditions for these sources.

The following table presents a list of typical materials that may be received and processed at a scrap and waste recycling facility and which may be potential pollutant sources if they are not managed properly.

TABLE N–2.—SIGNIFICANT MATERIALS POTENTIALLY EXPOSED TO STORM WATER RUNOFF AT SCRAP AND WASTE RECYCLING FACILITIES[1]

Significant materials	Potential sources	Pollutants of concern
White goods (appliances)	Leaking oil-filled capacitors, ballasts, leaking compressors, pumps, leaking pressure vessels, reservoirs, sealed electrical components and chipped or deteriorated painted surfaces.	PCBs, oil, lubricants, paint pigments or additives such as lead, and other heavy metals.
Ferrous and nonferrous turnings and cuttings	Cutting oil residue, metallic fines	Oil, heavy metals.
Materials from demolition projects	Deteriorated/damaged insulation, chipped painted surfaces, lead, copper, and steel pipes.	Asbestos fibers, lead, copper, zinc, cadmium, other metals, TKN.
Electrical components, transformers, switch gear, mercury float switches, sensors.	Leaking oil-filled transformer casings, oil-filled switch, float switches, radioactive materials in gauges, sensors.	PCBs, oils, mercury, ionizing radioactive isotopes.
Fluorescent lights, light fixtures	Leaking ballasts	PCBs, oil.
Food/beverage dispensing equipment	Leaking fluorescent light ballasts, chipped painted surfaces.	PCBs, oil, heavy metals from paint pigments and additives.
Hospital and dental waste and equipment	Drums/containers of hospital waste, shielding from diagnostic and other medical equipment, radioactive materials from gauges, sensors and diagnostic equipment.	Infectious/bacterial contamination, lead, ionizing radioactive isotopes.
Instruments	Radioactive material from thickness gages	Ionizing radioactive isotopes.
Insulated wire	Insulation and other coatings, wire	Lead, zinc, copper.
Lawnmowers, snowmobiles, motorcycles	Leaking engines, transmissions, fuel, oil reservoirs,leaking batteries.	Oils, transmission and brake fluids, fuel, grease, battery acid, lead acid.
Light gage materials	Deteriorating insulation, painted surfaces and other coatings.	Asbestos, lead, chromium.
Locomotives, rail cars	Leaking fuel reservoirs, fittings, hydraulic components, engines, bearings, compressors, oil reservoirs, worn brake pads, damaged insulation.	PCBs, diesel fuel, hydraulic oil, oil, brake fluid, grease from fittings, asbestos.
Motor vehicle bodies, engines, transmissions, exhaust systems.	Leaking fuel tanks, oil reservoirs, transmission housings, brake fluid reservoir and lines, brake cylinders, shock absorber casing, engine coolant, wheel weights, leaking battery casings/housings and corroded terminals, painted surfaces and corrosion inhibitors, exhaust system, catalytic converters.	Fuel, benzene, oil, hydraulic oil, transmission fluids, brake fluids, ethylene glycol (antifreeze), lead, lead acid, lead oxides, cadmium, zinc, other heavy metals.
Miscellaneous machinery and obsolete equipment.	Leaking reservoirs, damaged or chipped painted surfaces/coatings.	Fuel, oil, lubricants, lead, cadmium, zinc.
Pipes/materials from chemical and industrial plants.	Chemical residue, insulation, lead piping, chipped or damaged painted surfaces and protective coatings.	Chemical residue, oil, lubricants, damaged insulation (asbestos), lead, cadmium, zinc, copper.
Sealed containers, hydraulic cylinders	Leaking liquid reservoirs, containers, cylinders, miscellaneous chemicals.	Oil, PCBs, solvents, chemical residue.
Salvaged construction materials	Chemical residues, oils, solvents, lubricants, damaged insulation, chipped painted surfaces and protective coatings.	Chemical residue, oily wastes, asbestos, lead, cadmium, zinc.
Tanks, containers, vessels, cans, drums	Leaking or damaged containers	Chemical residue, oily wastes, petroleum products, heating oil.
Transformers (oil filled)	Leaking transformer housings	PCBs, oil.

[1] Institute of Scrap Recycling Industries, Inc.'s "Environmental Operating Guidelines." (April 1992).

(2) *Material processing.* The type of processes employed at a particular facility depends on the type of recyclable and waste material. Typical processes include: torch cutting, shredding, baling, briquetting, wire stripping and chopping, and compacting. Processes such as shredding and shearing reduce the bulk

size of recyclable scrap and waste into a size that is more easily transportable and which allows separation into uniform grades based on manufacturer specifications. Processes such as shredding of automotive bodies include a means of segregating materials into their ferrous and nonferrous fractions.

Process equipment at scrap and waste recycling facilities are also potential sources of pollutants in storm water runoff. The sources of concern will be discussed separately. Scrap process equipment such as shearers are often actuated by a hydraulic system. Components such as hydraulic reservoirs, hydraulic pumps, motors, cylinders, control valves, accumulators, filters, and fittings are prone to leaking hydraulic fluid. Some hydraulic machinery also require frequent lubrication of cutting and wear surfaces. Storm water runoff exposure to hydraulic fluids and other lubricants is very likely unless adequate source control measures such as good housekeeping, preventive maintenance, diversion and/or containment are provided.

Stationary process equipment also produce a substantial amount of residual particulate material that tends to accumulate on and around the equipment, particularly rotating machinery, moving parts, bearings, conveyors and at the output of the equipment, e.g., storage containers. Particulate material that accumulates can become a source of contamination if it comes in contact with both precipitation and storm water runoff. Other sources of residual particulate and waste material include air pollution equipment, material handling equipment and processing equipment. In the case of shredding equipment, there are typically three (3) separate material streams produced. Shredded material is ultimately separated into its ferrous and nonferrous fractions, and a third stream referred to as fluff. The fluff material consists of a heterogeneous mix of materials including, but not limited to, small metal fragments, plastics, rubber, wood and textiles. After the material exits the shredder (hammermill), it typically enters an air classification system that separates the lightweight fraction, e.g., particulates, from the more dense fraction. The ferrous metal fraction is then separated from the nonferrous fraction and fluff by the use of a magnetic separator (typically a belt- or drum-type magnetic separator). The separated material may be collected in a hopper or it may accumulate on the ground. If recyclable and nonrecyclable waste material is allowed to accumulate on the ground, a greater potential exists for this material to come in contact with either precipitation or storm water runoff.

The scrap and recycling industry uses a diversity of processes to reclaim and recycle materials that can contribute pollutants to storm water runoff. The following table presents a list of typical scrap equipment operations which are potential pollutant sources.

TABLE N–3.—TYPICAL PROCESS AND EQUIPMENT OPERATIONS THAT ARE LIKELY SOURCES OF POLLUTANTS[1]

Activity	Potential sources	Pollutants of concern
Air Pollution Equipment (including incinerators, furnaces, wet scrubbers, filter houses, bag houses).	Normal equipment operations that include the collection and disposal of filter bag material and ash, process wastewater from scrubbers, accumulation of particulate matter around leaking joint connections, malfunctioning pumps and motors, e.g., leaking gaskets, seals or pipe connections, leaking oil-filled transformer casings.	Hydraulic fluids, oils, fuels, grease and other lubricants, accumulated particulate matter, chemical additives, PCBs from oil-filled electrical equipment.
Combustion Engines	Spills and/or leaks from fueling tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections, worn gaskets, leaking transmission crankcases and brake systems (if applicable), leaking battery casings and/or corroded terminals.	Accumulated particulate matter, oil/lubricants, fuel (gas/diesel), fuel additives, antifreeze (ethylene glycol), battery acid, products of incomplete combustion.
Material Handling Systems (forklifts, cranes, conveyors).	Normal operations including spills and leaks from fuel tanks, hydraulic and oil reservoirs due to malfunction parts, e.g., worn gaskets and parts, leaking hose connections, and faulty seals. Damaged or faulty electrical switches (mercury filled) Damaged or leaking battery casings, including exposed corroded battery terminals. Damaged or worn bearing housings.	Hydraulic fluids, oils, fuels and fuel additives, grease and other lubricants, accumulated particulate matter, chemical additives, mercury, lead, battery fluids.
Stationary Scrap Processing Facilities (balers, briquetters, shredders, shearers, compactors, engine block/cast iron breakers, wire chopper, turnings crusher).	Normal equipment operations including leaks from hydraulic reservoirs, hose and fitting connections, worn gaskets, spills or leaks from fuel tanks, particulates/residue from scrap processing, malfunctioning pumps and motors, e.g., leaking gaskets, seals or pipe connections, leaking oil-filled transformer casings.	Heavy metals, e.g., zinc, copper, lead, cadmium, chromium, hydraulic fluids.
Hydraulic equipment and systems, balers/briquetter, shredders, shearers, compactors, engine block/cast iron breaker, wire chopper, turnings crusher.	Particulate/residue from material processing, spills and/or leaks from fueling tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections/fittings, leaking gaskets.	Hydraulic fluids/oils, lubricants, particulate matter from combustion engines, PCBs (oil-filled electrical equipment components), heavy metals (nonferrous, ferrous).
Electrical Control Systems (transformers, electrical switch gear, motor starters).	Oil leakage from transformers, leakage from mercury float switches, faulty detection devices.	PCBs, mercury (float switches), ionizing radioactive material (fire/smoke detection systems).

TABLE N–3.—TYPICAL PROCESS AND EQUIPMENT OPERATIONS THAT ARE LIKELY SOURCES OF POLLUTANTS[1]—Continued

Activity	Potential sources	Pollutants of concern
Torch cutting	Residual/accumulated particulates	Heavy metal fragments, fines.

[1] Institute of Scrap Recycling Industries, Inc.'s "Environmental Operating Guidelines." (April 1992).

(3) *Segregation of processed materials into uniform grades.* Processing, e.g., shearing, shredding, baling, etc., of recyclable materials is followed by its segregation into uniform grades to meet a particular manufacturer's specifications. If segregated recyclable material remains exposed to precipitation, the potential still exists for storm water contamination.

(4) *Disposal of nonrecyclable waste materials.* During recycling of scrap and waste materials, a significant fraction is nonrecyclable waste materials and must be disposed. The volume or quantity of material that remains unrecyclable may be too large to permit covered storage prior to shipment. Consequently, unrecyclable waste materials may be left exposed to both precipitation and runoff and, therefore, they are a likely source of storm water pollutants.

(5) *Other operations of concern.* There are a number of activities that frequently occur at scrap and waste recycling facilities including, heavy vehicle traffic over unstabilized areas, vehicle maintenance and fueling, and material handling operations. Operations associated with the receipt, handling, and processing of scrap and waste material frequently occur over areas that are not stabilized to prevent erosion. Unless specific measures or controls are provided to either prevent erosion or trap the sediment, this material will be carried away in storm water runoff and eventually exit the site. Suspended solids are of significant concern given the potential amount of unstabilized area and the significant amount of particulate matter that is often produced at these facilities. Both organic and inorganic pollutants can become bound up or absorbed to suspended solids in runoff. For this reason, today's proposed permit identifies conditions to minimize the contribution of suspended solid loadings from these facilities.

Some scrap and waste recycling facilities may also conduct vehicle maintenance onsite. Although many of these activities frequently occur indoors, there are specific activities which could contribute pollutants to storm water. This includes washdown of vehicle maintenance areas, leaks or spills of fuel, hydraulic fluids and oil and outdoor storage of lubricants, fluids, oils and oily rags. Fueling stations are also frequently conducted outdoors without any roof cover. Activities such as topping off fuel tanks, or overfilling storage tanks (without high-level alarms) are also activities that can cause contamination of runoff. One last activity of concern is vehicle washing which can result in accumulated residue material being discharged to a storm sewer system.

The following table highlights activities associated with vehicle maintenance and material handling that are potential sources of storm water contamination.

TABLE N–4.— OTHER POTENTIAL POLLUTANT SOURCE ACTIVITIES

Activity	Potential sources	Pollutants of concern
Material Handling Systems (forklifts, cranes, conveyors).	Spills and/or leaks from fueling tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections/fittings, leaking gaskets.	Accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), oil/lubricants, PCBs (electrical equipment), mercury (electrical controls), lead/battery acids.
Vehicle Maintenance	Parts cleaning, waste disposal of rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluids, brake fluids, coolants, lubricants, degreasers, spent solvents.	Fuel (gas/diesel), fuel additives, oil/lubricants, heavy metals, brake fluids, transmission fluids, chlorinated solvents, arsenic.
Fueling Stations	Spills and leaks during fuel transfer, spills due to "topping off" tanks, runoff from fueling areas, washdown of fueling areas, leaking storage tanks, spills of oils, brake fluids, transmission fluids, engine coolants.	Gas/diesel fuel, fuel additives, oil, lubricants, heavy metals.
Vehicle and Equipment Cleaning and Washing	Washing and steam cleaning	Solvent cleaners, oil/lubricants/additives, antifreeze (ethylene glycol).

(6) Pollutants found in storm water discharges. Sampling data provided in part 2 of the group application process revealed that storm water discharges from scrap and waste recycling facilities contain pollutants such as heavy metals, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), TSS, nutrients and oil and grease. The following table summarizes the statistical analysis of sampling data provided in part 2 group applications.

Table N–6 provides a comparison of a selected subset of these pollutants to freshwater acute criterion provided in EPA's "Gold Book."

TABLE N–5.— SUMMARY STATISTICS FOR SCRAP AND WASTE RECYCLING FACILITIES[1] (SIC 5093) (NONLIQUID RECYCLABLE WASTE MATERIALS.) ALL UNITS IN MG/L UNLESS OTHERWISE NOTED

Pollutant	# of Samples		Mean		Minimum		Maximum		Median		99th Percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
pH (std units)	136	N/A	N/A	N/A	4.93	N/A	10.2	N/A	N/A	N/A	9.56	N/A
BOD_5	131	120	23.49	24	0.00	0.00	330.0	360	9.0	9.0	330.0	330.0
COD	131	117	251.33	204	0.00	0.00	1586.0	2400	120.0	110.0	1323	1014
TSS	131	116	437.11	375	0.00	0.00	3994	5042	148.0	84.5	3100	4650
Nitrate + Nitrite N	136	117	1.76	5.9	0.00	0.00	84.0	220.0	0.81	0.80	28	129.0
TKN	132	114	3.44	3.4	0.00	0.00	43.0	39.0	2.05	2.20	25	22.0
Oil and grease	136	N/A	8.95	N/A	0.00	N/A	85.0	N/A	5.0	N/A	69	N/A
Total P	133	114	0.91	0.77	0.00	0.00	36.0	29.0	0.29	0.28	4.7	10.0
Total Pb	103	100	0.85	0.84	0.00	0.00	6.70	13.00	0.205	0.215	4.9	11.00
Total Cd	75	73	0.02	0.02	0.000	0.000	0.10	0.65	0.0074	0.005	0.069	.85
Total Cu	102	99	0.77	0.60	0.000	0.000	12.0	8.20	0.26	0.22	5.98	8.2
Total Zn	97	94	3.16	3.2	0.028	0.000	22.0	38.0	1.50	1.4	22.0	38.0
Total Cr	103	100	0.06	0.122	0.000	0.000	2.10	2.60	0.03	0.02	0.547	2.3
Total Ni	94	93	0.202	0.21	0.001	0.000	5.80	7.30	0.05	0.040	5.8	7.3
Arsenic	9	8	0.038	0.019	0.00	0.00	0.170	0.90	0.005	0.005	0.170	0.090
Total Al	5	3	4.56	3.327	.68	.68	10.0	7.6	4.0	1.70	10.0	7.6
PCB–1016	27	26	0.001	0.051	0.001	0.001	0.010	1.30	0.001	0.001	0.010	1.3
PCB–1221	26	24	0.001	0.001	0.001	0.000	0.010	0.001	0.001	0.001	0.010	0.001
PBC–1232	28	26	0.001	0.001	0.001	0.000	0.010	0.001	0.001	0.001	0.010	0.001
PCB–1242	27	26	0.001	0.047	0.000	0.000	0.010	1.30	0.001	0.001	0.010	1.3
PCB–1248	26	24	0.003	0.005	0.000	0.000	0.025	0.078	0.001	0.001	0.025	0.078
PCB–1254	26	26	0.001	0.001	0.000	0.000	0.010	0.006	0.001	0.001	0.010	0.006
PCB–1260	28	26	0.002	0.049	0.001	0.000	0.011	1.30	0.001	0.001	0.011	1.3

[1] Applicants that did not report the units of measurement for the reported values were not included in these statistics.
[2] Composite samples.

TABLE N–6.—COMPARISON SAMPLING DATA FOR SELECTED PARAMETERS VERSUS NURP VALUES AND THE EPA "GOLDBOOK"

Pollutant	Mean		Maximum		Median		"Goldbook"[1]	NURP
Sample type	Grab	Comp	Grab	Comp	Grab	Comp	N/A	Avg. conc
COD	251	204	1586	2400	120	110	N/A	94
TSS	437	375	3994	5042	148	84.5	N/A	239
TKN	3.44	3.47	43.0	39.0	39.0	2.05	N/A	2.3
Oil and Grease	8.95	N/A	85.0	N/A	5.0	N/A	note 3	N/A
Total Pb	0.85	0.84	6.70	13.00	0.205	0.215	[ii]0.082	0.238
Total Cd	0.02	0.02	0.10	0.65	0.0074	0.005	[ii]0.0039	.....
Total Cu	0.77	0.60	12.0	8.20	0.26	0.22	[ii]0.0167	0.053
Total Zn	N/A	3.2	22.0	38.0	1.5	1.4	[ii]0.0507	0.353
Total Cr	0.06	0.122	2.10	2.60	0.03	0.020	note [iv]	
Total Ni	0.202	0.21	5.80	7.30	0.05	0.04	[ii]1.4	

[1] Based on aquatic life criteria.
[ii] At freshwater acute concentration (aquatic life) at hardness of 100 mg/L. Toxicity decreases as hardness increases.
[iii] Oil and Grease (aquatic life) 0.01 of the lowest continuous flow 96-hour LC50.
[iv] Varies depending on chemical speciation.

The comparison of sampling results for metals to "goldbook" values indicates that storm water discharges originating from these facilities were substantively higher than the acute freshwater criterion. Given the frequency that these metals were reported in storm water discharges, another principal concern is the synergistic, additive and antagonistic effects that all these constituents may have on water quality. In addition, sampling data also indicates the presence of several congeners of PCBs, polycyclic aromatic hydrocarbons and phthalate esters. When taken in whole, storm water discharges from these facilities are often a complex matrix of metals, suspended solids, and organic compounds.

b. Waste recycling facilities (SIC 5093)—(liquid recyclable wastes). This subsection applies to those facilities engaged in the reclaiming and recycling of liquid wastes such as "spent solvents," "used oil," and "used ethylene glycol" typically identified under SIC 5093. This subsection is particularly applicable to those facilities that participated in EPA group application number 195. EPA received a single group application in this category of waste recycling facilities. The following is a profile of industrial activities and the types of significant materials associated with facilities participating in this group activity.

Group application number 195 included 220 facilities of which 214 were classified as service centers. Service centers accumulate spent solvent, used oil and antifreeze, filter cartridges and still bottoms contaminated with dry cleaning solvents (typically perchloroethylene), and used lacquer thinner from paint gun cleaning machines. The typical service center has a total storage capacity

limited to approximately 10,000 gallons in individual containers and tanks with a maximum storage capacity of 20,000 gallons each. Service centers are typically limited to a maximum of 6 tanks (a total of 120,000 gallons). Twenty (20) of the service centers also function as accumulation centers where they have a maximum storage capacity of 70,000 gallons of liquid materials in containers. None of the containers are opened except under conditions where a container begins to leak or is damaged.

The group application also included four (4) facilities that operated only as container transfer stations and do not operate storage tanks. These facilities are largely enclosed warehouses that provide secondarily contained storage areas. Three (3) facilities were identified as used oil depots where only oily water and/or used oil are accumulated in storage tanks. Storage tanks are limited to a maximum capacity of 20,000 gallons each. Used oil is transported to the facility in tanker trucks (3,500 gallons) and shipped out in tanker trucks (7,500 gallons). The used oil is ultimately transported to a processing or re-refining facility (not covered under this section). The following table summarizes the percentage of facilities with significant materials stored.

TABLE N–7.—SIGNIFICANT MATERIALS REPORTED IN GROUP APPLICATION NUMBER 195

Significant materials	Percent of facilities
Mineral spirits	98
Immersion cleaner	98
Dry cleaner solvents	98
Paint solvents	83
Industrial solvents	81
Spent antifreeze	59
Used oil	57
Allied products	08

The types of materials identified in Table N–7 are potential sources of storm water runoff contamination. Since these materials are stored and transported in individual drums and bulk storage tanks, the potential exists for spills and/or leaks during all phases of waste transport, waste transfer, container/drum handling and shipping.

There are a number of operations at these facilities that have significant potential to release pollutants to the environment if recyclable waste materials are not managed properly. Potential sources of pollutants are discussed in Part N.2.a.1 of today's proposed permit. However, in response to other Federal and State environmental regulations, such as RCRA and 40 CFR part 112 (Oil Pollution Prevention), facilities in this group application currently employ a range of the BMPs and structural controls that also benefit storm water quality. Typical measures and controls for controlling pollutants for facilities in this subsection are presented in Part N.2.b.

(1) Waste material handling and storage. Given the nature and type of materials stored and handled at these facilities, the potential exists for accidental spills and leaks. Consequently, the types of activities that occur at these facilities which could potentially result in contamination of storm water runoff is also of concern to EPA. The following table is a list of activities which may result in a release of pollutants.

TABLE N–8.—TYPES OF POTENTIAL POLLUTANT-CAUSING ACTIVITIES AT WASTE RECYCLING FACILITIES THAT HANDLE LIQUID RECYCLABLE WASTES

Activity	Potential sources of pollutants	Pollutants of concern
Drum/individual container storage and handling	Leaks or spills due to faulty container/drum integrity, e.g., leaking seals or ports. Container materials incompatible with waste material. Improper stacking and storage of containers.	Mineral spirits, industrial solvents, immersion cleaners, dry cleaner solvents, paint solvents, spent antifreeze.
Return and fill stations	Leaks, spills, or overflows from tanker truck transfer of wastes and hose drainage. Leaking pipes, valves, pumps, worn or deteriorated gaskets or seals.	Mineral spirits, industrial solvents, immersion cleaners, dry cleaner solvents, paint solvents, spent antifreeze.
Individual container/drum storage improper stacking and storage of containers.	Leaks or spills due to faulty container/drum integrity, e.g., leaking seals or ports.	Mineral spirits, industrial solvents, immersion cleaners, dry cleaner solvents, paint solvents, spent antifreeze.
Storage tank operations	Overfill of storage tanks, leaking pipes, valves, worn or deteriorated pumps seals. Leaking underground storage tanks.	Mineral spirits, industrial solvents, immersion cleaners, dry cleaner solvents, paint solvents, spent antifreeze.
Material handling equipment	Leaking fuel lines, worn gaskets, leaking hydraulic lines and connections.	Fuel, hydraulic fluid, oil and grease.

(2) Other activities of concern. The following table highlights other types of activities that are potential sources of storm water contamination.

TABLE N–9.—OTHER POTENTIAL SOURCES OF STORM WATER CONTAMINATION

Activity	Potential sources of pollutants	Pollutants of concern
Vehicle and equipment maintenance (if applicable).	Replacement of fluids such as transmission and brake fluids, antifreeze, oil and other lubricants, washdown of maintenance areas, dumping fluids down floor drains connected to storm sewer system, outside storage of fluids and oily rags and waste material.	Oil and grease, fuel, accumulated particulate matter, antifreeze.
Vehicle or equipment washing (if applicable)	Wash water or steam cleaning	Oil, detergents, chlorinated solvents, suspended solids and accumulated particulate matter.

(3) Pollutants found in storm water discharges. Based on data provided in group application sampling information, pollutants that were most frequently reported included TSS, BOD, COD, nitrite plus nitrate, oil and grease. The following table provides a statistical summary of data.

TABLE N–10.—SUMMARY STATISTICS FOR WASTE RECYCLING FACILITIES[1] (SIC 5093)—(RECYCLABLE LIQUID WASTES). ALL VALUES IN MG/L

Parameter	Number of samples		Mean		Min		Max		Median		99th Percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	22	17	18	9	2	2	94	48	5	5	79	36
COD	22	17	133	83	12	5	660	400	45	45	449	320
TSS	21	16	51	26	5	5	500	84	28	20	68	59
Nitrite + Nitrate	22	17	0.90	0.76	0.05	0.05	3.70	3.50	0.61	0.38	3.45	3.29
TKN	22	17	3.1	2.0	1.0	1.0	11.0	6.0	1.5	1.0	9.9	5.7
Oil and grease	22	N/A	1.8	N/A	1.0	N/A	5.0	N/A	1.5	N/A	4.0	N/A

[1] Applicants that did not report the units of measurement for the reported values were not included in these statistics.
[2] Composite samples.

Table N–10 indicates that, with the exception of BOD and COD, average concentrations in grab and composite samples were comparable with average values reported in the NURP study (NURP did not measure oil and grease). The data also indicates that pollutants such as industrial solvents were all below detection limits (without values). In the case of oil and grease, all concentration values were below the reportable concentration of 10 mg/L (see 40 CFR 110.10 and 117.21).

2. Options for Controlling Pollutants

a. Scrap and waste recycling facilities (SIC 5093) (nonliquid recyclable waste materials). This section addresses source control measures, BMPs and structural controls that are specifically applicable to the scrap waste and recycling facilities (SIC 5093) and which are engaged in the reclaiming and recycling of solid materials such as ferrous and nonferrous metals, plastics, paper, glass and cardboard and automotive parts. Part XI.N.2.b. of the permit addresses waste recycling facilities (SIC 5093) that are engaged in the reclaiming and recycling of liquid wastes such as used oils, industrial solvents and ethylene glycol.

The BMPs described in this subsection are specifically applicable to scrap and waste recycling facilities. Scrap and waste recycling facilities applying for coverage under Part XI.N. of today's proposed permit shall employ a broad and comprehensive range of BMPs and source control measures to minimize and/or eliminate the diversity of pollutants associated with scrap processing operations and inbound recyclable materials. In instances where facilities conduct certain operations indoors or under cover, a determination will be made by the owner/operator of the facility as to the applicability of these BMPs and source control measures to these particular activities.

The following table summarizes alternative source control measures, nonstructural BMPs (BMPs), and structural controls that are associated with and applicable to scrap and waste processing facilities (SIC 5093) (nonliquid recyclable materials).

TABLE N–11.—Summary of Alternative BMP Options for Scrap and Waste Recycling Processing Facilities

Activity	BMP alternatives
Inbound recyclable and waste material control:	Establish program to encourage suppliers of scrap, waste and other salvageable materials to drain residual fluids prior to arrival at the facility. Establish acceptance program for handling, storage and disposal of lead-acid batteries. Establish procedures for rejecting or handling, storing and disposal of hazardous wastes and other nonhazardous residual fluids Establish procedures to properly handle industrial turnings and cuttings and prohibiting cutting oils and metallic fines from coming in contact with runoff. Identify inspector training requirements.
Outside Scrap Material Storage: (liquids)	Conduct inspections for fluids, e.g., oils, transmission fluids, antifreeze, brake fluid, and fuels. Establish handling/ storage/disposal procedures for these materials.

TABLE N–11.—Summary of Alternative BMP Options for Scrap and Waste Recycling Processing Facilities—Continued

Activity	BMP alternatives
	Drain and collect liquids in a designated area. Provide covered storage or impervious areas with curbing/berms or other appropriate containment. Stored liquid materials in covered areas or impervious areas with curbing/berms or other appropriate measure.
	Establish spill prevention procedures.
	Provide adequate supply of materials for dry clean up of spills or leaks.
	Prevent runoff into liquid storage areas. Store liquid wastes in materially compatible containers. Minimize/eliminate the accumulation of liquid wastes.
	Establish procedures if hazardous wastes are discovered after material accepted.
	Conduct periodic inspections of storage areas.
	Conduct preventative maintenance of BMPs as necessary.
Outside Scrap Material Storage: (bulk solid materials).	Minimize runoff from coming into areas where significant materials are stored, e.g., diversion structures such as curbing, berms, containment trenches, surface grading, and elevated concrete pads or other equivalent measure.
	Use adsorbents to collect leaking or spills of oil, fuel, transmission and brake fluids, e.g., dry absorbent, drip pans.
	Install media filters such as catch basin filters and sand filters.
	Install oil/water separator in storage areas with vehicle transmissions and engines. Locate spill plans under stored vehicles.
	Provide nonrecyclable waste storage bins and containers.
	Conduct periodic inspections.
	Conduct preventative maintenance as necessary.
	Provide equipment operator training to minimize damage to controls, e.g., curbing and berms.
Storage Other: (lightweight materials)	Identify/provide supplier training or information bulletins on requirements for acceptance of lightweight materials.
	Encourage supplier participation in program to minimize/eliminate, as practicable, volume of semisolid and liquid residues in recyclable materials, e.g., residual fluids in aluminum and plastic containers.
	Provide covered storage, container bins or equivalent for lighter-weight materials such as glass, plastics, aluminum cans, paper, cardboard.
	Minimize/eliminate residue from bottles, containers, etc. from coming in contact with runoff. Establish dry clean up methods.
	Establish procedures and employee training for the handling, storage and disposal of residual fluids from small containers.
	Prohibit washdown of tipping floor areas.
	Provide good housekeeping to eliminate particulate and residual materials buildup. Establish cleaning schedule for high traffic areas.
	Provide covered disposal containers or equivalent for residual waste materials.
	Eliminate floor drains discharging to storm sewer.
Scrap processing operations:	Provide training to equipment operators on how to minimize exposure of runoff to scrap processing areas.
	Schedule frequent cleaning of accumulated fluids and particulate residue around all scrap processing equipment.
	Schedule frequent inspections of equipment for spills or leakage of fluids, oil, fuel, hydraulic fluids.
	Conduct routine preventive maintenance of equipment per original manufacturer's equipment (OME) recommendations. Replace worn or malfunctioning parts.
	Site process equipment on elevated concrete pads or provide runoff diversion structures around process equipment, berms, containment trenches or surface grading or other equivalent measure. Discharge runoff from within bermed areas to a sump, oil/water separator, media filter or discharge to sanitary sewer.
	Conduct periodic maintenance and clean out of all sumps, oil/water separators, media filters. Dispose of residual waste materials properly, e.g., according to RCRA.
	Provide curbing, dikes, and berms around scrap processing equipment to prevent contact with runoff.
	Where practicable, locate process equipment e.g., balers, briquetters, small compactors, under an appropriate cover.
	Provide cover over hydraulic equipment and combustion engines.
	Provide dry-clean up materials, e.g., dry-adsorbents, drip pans, absorbent booms, etc. to prevent contact of hydraulic fluids, oils, fuels, etc., with storm water runoff.
	Provide alarm, pump shutoff, or sufficient containment for hydraulic reservoirs in the event of a line break.
	Stabilize high traffic areas, e.g., concrete pads, gravel, pavement, around processing equipment, where practicable.
	Provide site gages or overfill protection devices for all liquid and fuel storage reservoirs and tanks.
	Establish spill prevention and response procedures, including employee training.
	Provide containment bins or equivalent for shredded material, especially lightweight materials such as fluff (preferably at the discharge of these materials from the air classification system).
Supplies for Process Equipment	Locate storage drums containing liquids, including oils and lubricants indoors. Alternatively, site palletized drums and containers on an impervious surface and provide sufficient containment around the materials. Provide sumps, oil/water separators, if necessary.
	Conduct periodic inspections of containment areas and containers/drums for corrosion.
	Perform preventive maintenance of BMPs, as necessary.
	Instruct employees on proper material handling and storage procedures.
Scrap lead acid battery Program	Establish inspection and acceptance procedures for scrap lead-acid batteries.

TABLE N–11.—Summary of Alternative BMP Options for Scrap and Waste Recycling Processing Facilities—Continued

Activity	BMP alternatives
	Provide supplier training on acceptance practices for scrap batteries.
	Provide employee training on the safe handling, storage and disposition of scrap batteries.
	Separate all scrap batteries from other scrap materials.
	Store scrap batteries under cover or equivalent.
	Establish procedures for the storage, handling, disposition of cracked or broken batteries in accordance with applicable Federal regulations, e.g., RCRA.
	Establish procedures to collect and dispose of leaking battery acid according to Federal regulations, e.g., RCRA.
	Provide covered storage or equivalent to prevent exposure to either precipitation or runoff.
Vehicle and equipment maintenance	Establish an inventory of materials used in the maintenance shop that could become a potential pollutant source with storm water runoff, e.g., fuels, solvents, oils, lubricants.
	Store and dispose of oily rags, filters (oil and air), batteries, engine coolant, transmission fluid, use oil, brake fluid, and solvents in a manner that minimizes potential contact with runoff and in compliance with State and Federal regulations.
	Label and track recycling of waste materials, e.g., batteries, solvent, used oil.
	Drain oil filters before disposal or recycling.
	Drain all fluids from all parts or components that will become scrap material or secondhand parts.
	Store liquid waste materials in compatible containers.
	Store and dispose used batteries in accordance with scrap lead acid battery program.
	Disconnect all floor drains connected to storm sewer system.
	Prohibit non-storm water discharges, e.g., dumping of used liquids down floor drains and washdown of maintenance areas.
	Provide employee training on appropriate storage and disposal of waste materials.
	Provide good housekeeping measures.
	Conduct inspections of work areas for compliance with BMPs.
Fueling	Use spill and overflow protection devices.
	Provide high level alarm on fuel storage tanks.
	Minimize/eliminate runoff onto fueling areas.
	Reduce exposure of fueling areas to precipitation by covering the fueling area.
	Provide dry adsorbents to clean up fuel spills.
	Conduct periodic inspections of fueling areas.
	Instruct personnel on proper fueling procedures.
	Provide curbing or posts around fuel pumps to prevent collisions during vehicle ingress and egress.
Vehicle and equipment washing	Avoid washing vehicles and equipment outdoors
	Use biodegradable, phosphate free detergents.
	Recycle wash water.
	Provide vehicle wash rack with dedicated sediment trap.
	Use autoshut-off valves on washing equipment.
Outdoor vehicle parking and storage	Use drip pans under all equipment and vehicles waiting maintenance.
	Cover vehicle and equipment storage areas.
	Conduct inspections of storage and parking areas for leaks and filled drip pans.
	Provide employee training.
Vehicle and equipment painting (where applicable).	Keep paint and solvents away from traffic areas. Conduct sanding and painting in nonexposed areas, e.g., under cover, in accordance with OSHA standards.
	Cleanup accumulated particulate matter.
	Minimize overspraying parts.
	Dispose or recycle paint, solvents and thinner properly.
	Provide training to employees
	Conduct periodic inspections of paint spraying areas.
Erosion and sediment control	Minimize runon from adjacent properties, e.g., diversion dikes, berms, or equivalent.
	Trap sediment at downgradient locations and outlets serving unstabilized areas. This may include filter fabric fences, gravel outlet protection, sediment traps, vegetated or riprap swales, vegetated strips, diversion structures, catch-basin filters, retention/detention basins or equivalent.
	Runoff containing oil and grease may include the use of absorbent booms or sand filters in front of outlet structures or other equivalent measures.
	Stabilize all high traffic areas, including all vehicle entrances and exit points.
	Conduct periodic sweeping of all traffic areas.
	Conduct inspections of BMPs.
	Perform preventative maintenance as needed on BMPs.
	Provide employee training on the proper installation and maintenance of erosion and sediment controls.

b. Waste recycling facilities (SIC 5093)—(recyclable liquid wastes). This section addresses source control measures, BMPs, and structural controls that are specifically applicable to waste recycling facilities (SIC 5093) which are engaged in such activities as reclaiming and recycling of liquid wastes such as spent solvents, used oil, and used antifreeze (ethylene glycol). Waste recycling facilities applying for coverage under Part XI.N. of today's proposed permit will be required to employ a comprehensive range of BMPs and source control measures to minimize contact of pollutants with storm water runoff and precipitation. In instances where facilities conduct certain

operations indoors or under cover, a determination will be made by the owner/operator of the facility as to the applicability of these BMPs and source control measures to their particular facility. The following table summarizes the percent breakdown of BMPs that were reported by applicants participating in group application number 195.

TABLE N–12.—TYPES OF BMPS REPORTED IN EPA GROUP APPLICATION NUMBER 195

BMP	Percent of facilities
Secondary Containment (includes tanks, piping, and return/fill stations)	70
Containment Trench (includes closed loop containment trenches with sumps, sloped floors, and/or berms)	91
Roof (includes canvass tent roofs and enclosed structures)	7
Contingency Plan (serves as Spill Prevention and Countermeasures Control Plan)	100
Prevention and Preparedness Plan (includes inspection information and general housekeeping procedures)	100

The following table summarizes types of BMPs, and structural control options that are applicable to waste recycling facilities.

TABLE N–13.—TYPES OF BMP OPTIONS APPLICABLE TO LIQUID WASTE RECYCLING FACILITIES

Activity	BMP alternatives
Individual drum/container storage	Ensure container/drums are in good condition. Store waste materials in materially compatible drums. Use containers that meet National Fire Protection Association (NFPA) guidelines.
	Put individual containers on pallets. Limit stack height of individual containers/drums. Provide straps, plastic wrap, or equivalent around stacked containers to provided stability.
	Label/mark drums. Segregate hazardous and flammable wastes. Comply with NFPA guidelines for segregation of flammable wastes.
	Provide adequate clearance to allow material movement and access by material handling equipment.
	Provide semipermanent or permanent cover over wastes.
	Provide adequate clearance between stored materials to allow movement and handling.
	Establish clean up procedures, including the use of dry adsorbents, in the event of spills or leaks.
	Prohibit washing down of material storage areas. Disconnect or seal all floor drains from storm sewer system.
	Develop spill prevention, countermeasures and control (SPCC) procedures for all liquid container storage areas. Ensure employees are familiar with SPCC procedures. Schedule/ conduct periodic employee training.
	Provide secondary containment, dikes, berms, containment trench, sumps, or other equivalent measure, in all storage areas.
Bulk liquid storage	Use welded pipe connections versus flange connections. Inspect all flange gaskets for deterioration.
	Apply corrosion inhibitors to exposed metal surfaces.
	Provide high level alarms for storage tanks.
	Provide redundant piping, valves, pumps, motors, as necessary, at all pumping stations. Provide manually activated shutoff valves in the event of spill. Install visible and/or audible alarms in the event of a spill.
	Install manually activated drainage values, or equivalent, versus flapper-type drain values. Provide adequate security against vandalism and tampering.
	Provide secondary containment around all bulk storage tanks, including berms, dikes, surface impoundments or equivalent. Ensure surfaces of secondary containment areas are adequately sealed to prevent leaks.
	Provide stationary boxes around all return and fill stations to eliminate/minimize hose drainage and minor waste transfer spills.
Waste transfer areas	Provide secondary containment or equivalent measures around all liquid waste transfer facilities.
	Provide cover over liquid waste transfer areas.
	Establish clean up procedures for minor spills including the use of dry adsorbents.
Inspections	Conduct inspections of all material storage, handling and transfer areas.
	Document signs of corrosion, worn parts or components on pumps and motors, leaking seals and gaskets.
	Conduct periodic nondestructive testing (NDT) of all bulk storage tanks for signs of deteriorating structural integrity.
Preventive maintenance	Conduct periodic preventive maintenance of all structural controls, replace worn parts on components on valves, pumps, motors per manufacturer's recommendations.
Vehicle maintenance (if applicable)	Establish an inventory of materials used in the maintenance shop that could become a potential pollutant source with storm water runoff, e.g., fuels, solvents, oils, lubricants.
	Store and dispose of oily rags, filters (oil and air), batteries, engine coolant, transmission fluid, use oil, brake fluid, and solvents in a manner that minimizes potential contact with runoff and in compliance with State and Federal regulations.
	Label and track recycling of waste materials, e.g., batteries, solvent, used oil.
	Drain oil filters before disposal or recycling.
	Drain all fluids from all parts or components that will become scrap material or secondhand parts.
	Store liquid waste materials in compatible containers.
	Store and dispose used batteries in accordance with scrap lead acid battery program.

TABLE N–13.—TYPES OF BMP OPTIONS APPLICABLE TO LIQUID WASTE RECYCLING FACILITIES—Continued

Activity	BMP alternatives
	Disconnect all floor drains connected to storm sewer system.
	Prohibit non-storm water discharges, e.g., dumping of used liquids down floor drains and washdown of maintenance areas.
	Provide employee training on appropriate storage and disposal of waste materials.
	Provide good housekeeping measures.
	Conduct inspections of work areas for compliance with BMPs.
Vehicle cleaning (if applicable)	Avoid washing vehicles and equipment outdoors.
	Use biodegradable, phosphate free detergents.
	Recycle wash water.
	Provide vehicle wash rack with dedicated sediment trap.
	Use autoshut-off valves on washing equipment.
Training	Provide employee training on proper material handling and storage procedures. Require familiarization with applicable SPCC measures.

3. Discharges Covered Under This Section

The requirements listed under this section are applicable to storm water discharges from the following activities: facilities that are engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass. These types of activities are typically identified in SIC 5093. Facilities that engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits and industrial solvents and which are classified SIC 5093 are also covered under this section.

4. Special Conditions

The following section identifies special conditions that are applicable to permittees applying for coverage under Part XI.N. of today's proposed permit.

a. Prohibition of non-storm water discharges. This section requires scrap and waste recycling facilities that are typically classified in SIC 5093 to certify that certain non-storm water discharges are not occurring at their facilities. A list of non-storm water discharges that are not authorized by this section has been identified. These discharges are prohibited due to the likelihood these discharges will contain substantial pollutant concentrations. The following non-storm water discharges are not authorized by this section:

- Waste discharges to floor drains or sinks connected to the facilities storm sewer or storm drainage system
- Water originating from vehicle and equipment washing
- Steam cleaning wastewater
- Process wastewaters
- Washwater originating from cleaning tipping floor areas or material receiving areas
- Wastewater from wet scrubbers
- Boiler blowdown
- Noncontact and contact cooling water
- Discharges originating from dust control spray water
- Discharges from oil/water separators and sumps
- Discharges originating from the cleaning out of oil/water separators or sumps
- Discharges from bermed areas with a visible oily sheen or other visible signs of contamination.

The operators of non-storm water discharges must seek coverage for these discharges under a separate National Pollutant Discharge Elimination System (NPDES) permit if discharging to either a municipal separate storm sewer system or to waters of the United States. If such a permit has been issued, a copy of the NPDES permit must be attached to the applicant's storm water pollution prevention plan (the plan). If a permit application has been submitted for a non-storm water discharge, a copy of the application must be attached to the plan.

For facilities that have prohibited discharges identified under this section and which discharge to a sanitary sewer system, the facility operator is required to notify the operator of the sanitary sewer system in writing. The notification should be attached to the plan. However, for facilities that have been issued an industrial user permit under the pretreatment program for discharges prohibited under this section, a copy of the permit must be attached to the plan. In all instances, the permit applicant must document how non-storm water discharges are disposed and provide the pertinent documentation of that disposal practice within the plan.

5. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. In addition to the supplemental information requirements identified in Part VI.C., scrap and waste recycling facilities in SIC 5093 are required to provide the additional information applicable to their industrial sector. Each subsection of the storm water pollution prevention plan is broken out into two subcategories; scrap and waste recycling facilities (nonliquid materials) and waste recycling facilities (liquid materials).

(1) Description of potential pollutant sources—(a) Scrap and Waste Recycling Facilities (nonliquid recyclable wastes)—Under description of potential pollutant sources, this section proposes that scrap and waste recycling facilities will provide a description of potential pollutant sources in areas with stockpiled scrap and waste materials, bulk liquid storage or containerized liquids, scrap and waste processing equipment, material loading and unloading, air pollution control equipment, waste treatment, storage, and disposal, processed scrap material, and metal particulates. Metal cuttings and turnings should be segregated from other scrap materials and should be stored in an appropriately covered area. The plan should also address measures to collect any residual fluids. Due to the tendency for these materials to contain residual cutting fluids, runoff or precipitation that comes in from these turnings and cuttings shall be discharged into a sump, sanitary sewer, oil/water separator or other equivalent measure to prevent the discharge of significant quantities of oil.

(i) Scrap and waste material stockpiles (outdoors)—The plan will address areas where significant materials are exposed to either storm water runoff or precipitation. The plan must describe those measures and controls used to minimize contact of storm water runoff with stockpiled materials. The plan should include measures to minimize the extent of storm water contamination from these

areas. The following types of BMPs shall be considered within the plan:

• Promoting the diversion of runoff away from these areas through such practices as dikes, berms, containment trenches, culverts and/or surface grading;

• Permanent or semipermanent covers, or other similar forms of protection over stockpiled materials. This may include the use of containment bins, covered containers and dumpsters for processed scrap and other recyclable and nonrecyclable waste materials;

• Retention and detention basins, ponds, sediment traps and/or vegetate swales and strips, to facilitate settling and/or filtering out of pollutants in runoff from material stockpile areas;

• Media filtration such as catch basin filters and sand filters; and

• Oil/water separators and dry adsorbents in stockpile areas that are potential sources of residual petroleum-based fluids.

(ii) Scrap and waste material stockpiles (indoors)—The plan will address, at a minimum, measures and controls to minimize and, whenever feasible, eliminate residual liquids and particulate matter from materials stored indoors from coming in contact with surface runoff. This will include good housekeeping measures to collect residual liquids from aluminum, glass and plastic containers and prohibiting the practice of washing down tipping floors or other material processing areas. Material stockpile areas with existing floor drains will be inspected to ensure that they are no longer connected to the storm sewer system or storm drain conveyance. Any floor drains connected to the storm drainage system will be plugged or sealed.

(iii) Scrap processing equipment—The plan will address areas where scrap and waste processing equipment are sited. This includes measures and controls to minimize surface runoff from coming in contact with scrap processing equipment. The plan will specifically address measures to prevent the release of liquids, e.g., hydraulic fluids, fuel, oils, lubricants and accumulated particulate matter. At a minimum, this will include provisions to conduct periodic inspections and preventive maintenance of equipment for leaks, spills, malfunctioning, worn or corroded parts or equipment. In the case of processing equipment that generate visible amounts of particulate residue, e.g., shredding facilities, the plan will describe measures to minimize contact of runoff with residual fluids and particulate matter. In the case of shredded material, the plan shall address measures to minimize fluff material from coming in contact with storm water runoff or precipitation. The plan should consider the use of containment bins or other suitable containers to collect shredded material exiting the shredder facility. At a minimum, the plan shall include the following:

• A schedule of periodic inspections of equipment for leaks, spills, malfunctioning, worn or corroded parts or equipment;

• Preventive maintenance program to repair and/or maintain processing equipment according to manufacturer's recommendations;

• Measures to minimize the exposure of precipitation or runoff to processed materials, e.g., shredded scrap, fluff;

• High level alarms or other equivalent protection devices on unattended hydraulic reservoirs over 150 gallons in capacity;

• In addition to the requirements identified above, the plan shall consider the use of one or a combination of the following BMPs or other equivalent practice (note: the permittee may identify BMPs that mutually satisfy requirements for this paragraph and this section that address other sources of pollutants, e.g., outdoor material stockpiles): diversion structures such as dikes, berms, culverts, containment trenches, elevated concrete pads, grading to minimize contact of storm water runoff with outdoor processing equipment; oil/water separators, sumps, or dry adsorbents in processing areas that are potential sources of residual petroleum-based compounds and grease; permanent or semipermanent covers, or other similar measures; retention and detention basins, ponds, sediment traps or vegetated swales and strips, to facilitate settling or filtering out of pollutants in runoff from scrap and recyclable waste processing areas; and/or media filtration such as catch basin filters and sand filters.

(iv) Scrap lead-acid battery program—The plan will address measures and controls for the proper receipt, handling, storage and disposition of scrap lead-acid batteries. This includes procedures for accepting scrap batteries and how they will be segregated from other scrap materials. The plan will specifically address procedures for managing battery casings that may be cracked or leaking, including the proper handling and disposal of residual fluids. The plan will identify measures to minimize and, whenever possible, eliminate exposure of scrap batteries to either runoff or precipitation. The plan should also address the schedule for conducting periodic inspections of scrap battery storage areas and applicable source control measures. The plan will describe measures to provide employee training on the management of scrap batteries.

(v) Erosion and sediment control—The plan must identify all areas associated with industrial activity that have a high potential for soil erosion. Appropriate stabilization measures, nonstructural and structural controls must be provided in these areas. The plan must also contain a narrative consideration of the appropriateness for selected erosion and sediment controls. In addition, the plan shall identify nonstructural and structural controls necessary to address suspended loadings from those areas that tend to experience a buildup of visible amounts of particulate matter. At a minimum, the plan will include at least one of the following measures:

• Filtering or diversion practices, such as filter fabric fence, sediment filter boom, earthen or gravel berms, curbing or other equivalent measure, placed around exposed significant materials, scrap processing equipment and inlets or catch basins;

• Catch basin filters, filter fabric fence, or equivalent measure, place in or around inlets or catch basins that receive runoff from scrap and waste storage areas, and processing equipment;

• Sediment traps, vegetative buffer strips, or equivalent, that effectively trap or remove sediment prior to discharge through an inlet or catch basin.

In instances where significant erosion and suspended solids loadings continue after installation of nonstructural controls, the plan shall provide a detention or retention basin or other equivalent structural control. All structural controls shall be designed using good engineering practice. All structural controls and outlets that are likely to receive discharges containing oil and grease must include appropriate measures to minimize the discharge of oil and grease through the outlet riser. This may include the use of an absorbent boom.

(vi) Spill prevention and response procedures—Spills are most likely to occur during processing or loading and unloading of materials. For this reason, it is important that facilities establish standard safe practices for these operations. Common causes of spills or leaks include container failures, equipment leaks, and materials handling. Frequent inspections of storage areas and equipment will reduce the likelihood that faulty containers and equipment will go unnoticed. Employee education and training described below

should also reduce the chance of spills occurring. The plan shall include the following practices:

- The plan shall describe spill prevention and response measures to address areas that are potential sources of leaks or spills of fluids;
- All visible leaks and spills shall be contained and cleaned up as soon as possible. If malfunctioning equipment is responsible for the spill or leak, repairs shall also be conducted as soon as possible;
- Cleanup procedures shall be identified in the plan, including the use of dry absorbent materials. The plan shall provide that an adequate supply of dry absorbent material shall be maintained onsite, and used absorbent material shall be cleaned up and disposed of properly;
- Drums containing liquids, including oil and lubricants, shall be stored indoors; or in a bermed area; or in overpack containers or spill pallets; or in similar containment devices;
- Overfill prevention devices shall be installed on all fuel pumps and tanks;
- Drip pans or equivalent measures shall be placed under any leaking piece of stationary equipment until the leak is repaired. The drip pans must be inspected for leaks and checked for potential overflow. They will be emptied regularly to prevent overflow and all liquids will be disposed of in accordance with all requirements under RCRA.
- An alarm and/or pump shut off system shall be installed and maintained on all outside equipment with hydraulic reservoirs exceeding 150 gallons in order to prevent draining the tank contents if a line breaks, provided all parts of the hydraulic system are not visible to the operator of the processing equipment. As an alternative, such equipment may have a secondary containment system capable of containing the contents of the hydraulic reservoir plus adequate freeboard for precipitation.

(*vii*) *Monthly inspection program*—The monthly inspection will include all designated areas of the facility and equipment identified in the plan. The inspection will include a means of tracking and conducting follow up actions based on the results of the inspection. The inspections will be conducted by members of the Storm Water Pollution Prevention team. At a minimum, the visual inspection shall include the following areas:

- All outdoor scrap processing areas;
- All material unloading and loading areas (including rail sidings) that are exposed to either precipitation or storm water runoff;
- Areas where structural BMPs have been installed;
- All erosion and sediment BMPs;
- Outdoor vehicle and equipment maintenance areas;
- Vehicle and equipment fueling areas; and
- All areas where waste is generated, received, stored, treated, or disposed and which are exposed to either precipitation or storm water runoff.

If exposed to precipitation or storm water runoff, the inspection will identify corroded or leaking containers, corroded or leaking pipes, leaking or improperly closed valves and valve fittings, leaking pumps and/or hose connections, and deterioration in diversionary or containment structures. Any spills or leaks will be immediately addressed according to the facilities. A record of inspections will be maintained with the plan.

The BMPs identified above have been employed by scrap and waste recycling facilities and are believed to be appropriate given the types of pollutants found in storm water discharges from these facilities. In addition, the diversity of options allows permittees to select those BMPs that are most applicable to the extent of the risk that exists at a particular facility. In instances where nonstructural measures are not sufficient, the conditions direct the permittee to more stringent requirements such as structural controls.

(b) Waste recycling facilities (recyclable liquid wastes)—In addition to the baseline requirements for plans, all permittees seeking coverage under Part XI.N. of today's proposed permit must specifically address the following areas within their plan.

(*i*) *Waste material storage (indoors)*—The plan will address measures and controls to minimize residual liquids from waste materials stored indoors from coming in contact with surface runoff. The plan must also include a sufficient supply of dry-absorbent materials or a wet vacuum system or other equivalent measure to promptly respond to minor leaks or spills. This includes measures for secondary containment or its equivalent, procedures for proper material handling (including labeling and marking) and storage of containerized materials. Drainage from bermed areas shall be discharged to an appropriate treatment facility or sanitary sewer system. Discharges from bermed areas shall be covered by a separate NPDES permit or industrial user permit under the pretreatment program. The drainage system, where applicable, should include appropriate appurtenances such as pumps or ejectors and manually-operated valves of the open-and-close design.

(*ii*) *Waste material storage (outdoors)*—The plan will address areas where significant materials are exposed to either storm water runoff or precipitation. The plan must include measures to provide appropriate containment, drainage control and/or other appropriate diversionary structures. The plan must describe those measures and controls used to minimize contact of storm water runoff with stored materials. The plan shall also include the following preventative measures or its equivalent:

- An appropriate containment structure such as dikes, berms, curbing or pits, or other equivalent measure;
- The containment shall be sufficient to store the volume of the largest single tank and shall include sufficient freeboard for precipitation; and
- A sufficient supply of dry-absorbent materials or a wet vacuum system, or other equivalent measure, to collect liquids from minor spills and leaks in contained areas.

(*iii*) *Truck and rail car waste transfer areas*—The plan will describe measures and controls for truck and rail car loading and unloading areas. This includes appropriate containment and diversionary structures to minimize contact with precipitation and/or storm water runoff. The plan will also address measures to clean up minor spills and/or leaks originating from the transfer of liquid wastes. This may include dry-clean up methods, roof coverings, and other runoff controls.

(*iv*) *Spill prevention and response procedures*—The plan will address measures and procedures to address potential spill scenarios that could occur at the facility. This includes all applicable handling and storage procedures, containment, diversion controls and clean-up procedures. The plan will specifically address all outdoor and indoor storage areas, waste transfer areas, material receiving areas (loading and unloading), and waste disposal areas.

(*v*) *Monthly site inspections*—The facility will conduct monthly visual inspections by a member or members of the storm water pollution prevention team. The monthly inspection will include all designated areas of the facility and equipment identified in the plan. The inspection will include a means of tracking and conducting follow up actions based on the results of the inspection. At a minimum, the monthly site inspection shall include the following areas:

- Material storage areas;

• Material unloading and loading areas (including rail sidings) that are exposed to either precipitation or storm water runoff;

• Areas where structural BMPs have been installed;

• All erosion and sediment BMPs;

• Outdoor vehicle and equipment maintenance areas (if applicable);

• Vehicle and equipment fueling areas (if applicable); and

• All areas where waste is generated, received, stored, treated, or disposed and which are exposed to either precipitation or storm water runoff.

If exposed to precipitation or storm water runoff, the inspection will identify corroded or leaking containers, corroded or leaking pipes, leaking or improperly closed valves and valve fittings, leaking pumps and/or hose connections, and deterioration in diversionary or containment structures. Any spills or leaks will be immediately addressed according to the facility's spill prevention and response procedures.

6. Monitoring and Reporting Requirements

a. *Analytical monitoring requirements.* EPA believes that scrap and waste material processing and recycling facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires scrap and waste material processing and recycling facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table N–13. The pollutants listed in Table N–13 were found to be above benchmark levels for a significant portion of scrap and waste material processing and recycling facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from scrap and waste material processing and recycling facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from scrap and waste material processing and recycling facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table N–13. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE N–13.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Chemical Oxygen Demand (COD)	65.0
Total Kjeldahl Nitrogen (TKN)	1.5
Total Recoverable Aluminum	0.75
Total Recoverable Cadmium	0.0018
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
PCBs	0.00000044
Total Recoverable Zinc	0.065
Nitrate + Nitrite Nitrogen	0.68
Total Recoverable Arsenic	0.000018

If the average concentration for a parameter is less than or equal to the value listed in Table N–13, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table N–13, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE N–14.—SCHEDULE OF MONITORING

2nd year of permit coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table N–13, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table N–13, then no further sampling is required for that parameter.
4th year of permit coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table N–13. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall

be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: The examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from areas for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation. These notices specifically require that facilities with storm water discharges that are associated with areas for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation are required to monitor their storm water discharges for oil and grease, COD, total suspended solids, pH, total recoverable copper, and total recoverable lead. Today's proposed permit contains increased monitoring requirements for battery reclaimers. EPA requests comment upon the difference between the monitoring requirements set out for battery reclaimers in the September 1992 General Permits and those required in today's proposed permit.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those proposed in Part XI.N.5. of today's proposed permit.

a. Monitoring requirements for scrap and waste recycling facilities (non-liquid recyclable wastes). During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with storm water discharges from scrap and waste recycling facilities that are primarily engaged in the processing, reclaiming and wholesale distribution of nonliquid recyclable materials, but limited to those activities classified SIC 5093, shall monitor for TSS, oil and grease, pH, and semiannual acute Whole Effluent Toxicity (WET) beginning no later than 3 years from date of permit issuance except as provided below in paragraphs XI.N.7.b. (Sampling Waiver), XI.N.7.c. (Representative Discharge), and XI.N.7.d. (Alternative Certification). Permittees identified in this part must report in accordance with Part VI.B. (Reporting: Where to Submit) and paragraph XI.N.7.f. (Reporting: When to Submit).

In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

b. Sampling waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.). Dischargers are precluded from exercising this waiver more than once during a 2-year period.

c. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. Permittees required to submit monitoring information under Parts XI.N.6. a. or c. of this permit shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report (DMR).

d. Alternative certification. A discharger is not subject to the monitoring requirements of Part XI.N. of this permit for a given outfall provided the discharger makes a certification, on an annual basis for discharges identified under Part XI.N.1., under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and was not exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to the U.S.

Environmental Protection Agency (EPA) in accordance with Part VI.C. of this permit.

e. Toxicity testing. Permittees and new discharges that are required to monitor for acute whole effluent toxicity shall initiate the series of tests described below no later than 3 years from permit issuance.

(1) The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev 9/91), Section 6.1). Freshwater species must be used for discharges to freshwater waterbodies. Due to the nonsaline nature of rainwater, freshwater test species should also be used for discharges to estuarine, marine or other naturally saline waterbodies.

(2) All test organism, procedures and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater Marine Organisms," EPA/600/4–90–027 (Rev. September 1991). EPA has proposed to establish regulations regarding these test methods (December 4, 1989, 53 FR 50216).

(3) Tests shall be conducted semiannually on a grab sample of the discharge. Tests shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–027 (Rev. September 1991), Section 12, Report Preparation, and the report submitted to EPA with the DMRs. On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(4) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the source(s) of toxicity and to reduce the toxicity of their storm water discharges. The permittee shall continue to conduct semiannual whole effluent toxicity testing until such time that acute whole effluent toxicity is no longer detected.

(5) Type of sample. The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes. Sampling locations shall be limited to those outfalls servicing portions of the facility engaged in industrial activity.

(6) Table N–1 summarizes sampling parameters, type and frequency information for permittees required to monitor under this part of the permit:

TABLE N–1

Parameter	Unit	Frequency[1]	Sample Type
pH	std. units	2/permit term	Grab.
TSS	mg/L	2/permit term	Grab.
Oil and Grease	mg/L	2/permit term	Grab.
Acute whole effluent toxicity	N/A	2/permit term	Grab.

[1] Monitoring requirements for all parameters listed in Table N–1 shall begin no later than 3 years from the date of issuance of the final permit. Monitoring for, pH, oil and grease, and TSS shall continue on a semiannual basis for the remainder of the permit term.

(7) Visual monitoring requirements. All scrap and waste recycling facilities (nonliquid recyclable wastes) shall be required to conduct semiannual visual inspections of their discharges for sediment, oil and grease, and other visible signs of contamination. The facility shall establish a record of visual observations that shall be kept with the pollution prevention plan. In the event a facility observes a discharge with oil and grease or other reportable hazardous substance in excess of a reportable quantity (see 40 CFR part 110, 40 CFR part 117, or 40 CFR part 302), the facility shall document preventative and corrective actions taken to minimize the potential for reoccurrence. This permit does not relieve permittees of the reporting requirements of 40 CFR part 117 and 40 CFR part 302.

f. Reporting: when to submit.

(1) Permittees that are required to conduct sampling under this part of the permit shall submit monitoring results obtained during the reporting period on DMR Form(s) postmarked no later than the 30 days after the completion of the sampling event.

g. Retention of records. (1) The permittee shall retain records of all inspections and monitoring information, including certification reports, noncompliance reports, calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, and supporting data, requested by the permitting authority for at least 3 years after the date that the permit expires.

h. Waste recycling facilities (liquid recyclable wastes) reporting under section 313 of SARA Title III. (1) Facilities reporting under Section 313 of SARA Title III must monitor their storm water discharges according to the requirements listed at Part VI.A.

O. Storm Water Discharges Associated With Industrial Activity From Steam Electric Power Generating Facilities, Including Coal Handling Areas

The conditions proposed in this section apply to storm water discharges from steam electric power generating facilities. The steam electric power generating category includes facilities which are coal, oil, gas, or nuclear fired. Heat captured co-generation facilities are not covered under the definition of storm water discharge associated with industrial activity, however, dual fuel co-generation facilities are included in the definition. When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit

apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

Storm water discharges from coal piles are eligible for coverage under this permit, where these discharges are not already subject to an existing NPDES permit.

1. Industrial Profile

The production of electrical energy always involves the conversion of some other form of energy. The two most important sources of energy which are converted to steam electric energy are the chemical energy of fossil fuels and the atomic energy of nuclear fuels. Current uses of fossil fuels are based on a combustion process, followed by steam generation to convert the heat first into mechanical energy and then to convert the mechanical energy into electrical energy. Nuclear power plants utilize a cycle similar to that used in fossil fueled power plants except that the source of heat is atomic interactions rather than the combustion of fossil fuel.

The steam electric power generating process for fossil fuel systems are typically enclosed and subject to effluent limitations guidelines [40 Code of Federal Regulations (CFR) part 423], as is coal pile runoff. However, the unloading and transport of coal within the facility is subject to the conditions set forth in this section of today's proposed permit. Likewise, the unloading and storage areas for liquid fuels and chemicals are subject to the conditions in this section of today's proposed permit. Fossil fuel combustion waste disposal areas are subject to storm water regulations but are discussed in the landfill and industrial waste disposal sector of today's proposed permit.

Industrial activities occurring at steam electric power generating facilities that pertain to the storm water rule include, "* * * but [are] not limited to, storm water discharges from industrial plant yards; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water" (40 CFR 122.26(b)(14)). Common industrial activities at steam electric power generating facilities include the unloading, transport, and storage of raw materials, and the disposal of waste materials.

Significant materials include, "* * * but [are] not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under Section 101(14) of CERCLA; any chemical facilities required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges" (40 CFR 122.26(b)(12)). Significant materials commonly found at steam electric power generating facilities include: coal; diesel fuel; and waste materials.

Historically, steam electric power generating facilities were categorized in accordance with the type of fuel they burned. Recently, however, steam electric power generating facilities have modified their equipment to enable them to use more than one fuel. Presented below are brief descriptions of the industrial activities and significant materials associated with the production of steam electric power. Due to the increase in facilities burning multiple fuels the industrial activities and significant materials are discussed together. However, the industrial activities and significant materials for nuclear powered facilities are discussed separately. Unique practices are noted.

a. Industrial activities: fossil fuel powered plants. Steam electric power generation can be divided into four stages. In the first operation, fossil fuel (coal, oil, or natural gas) is burned in a boiler furnace. The evolving heat is used to produce pressurized and superheated steam. This steam is conveyed to the second stage, the turbine, where it gives energy to the rotating blades and, in the process, loses pressure and increases in volume. The rotating blades of the turbine act to drive an electric generator or alternator to convert the imparted mechanical energy into electrical energy. The steam leaving the turbine enters the third state, the condenser, where it is condensed to water. The liberated heat is transferred to a cooling medium which is normally water. Finally, the condensed steam is reintroduced into the boiler by a pump to complete the cycle.

Features unique to coal-fired plants include coal storage and preparation (transport, beneficiation, pulverization, drying), coal-fired boiler, ash handling and disposal systems, and flue gas cleaning, and desulfurization.

b. Significant materials: fossil fuel powered plants. The type of fuel (coal, oil, gas, nuclear) used to fire power plant boilers most directly influences the number of waste streams. The influence comes principally from the effect of fuel on the volume of ash generated. Stations using heavy or residual oils generate fly ash in large quantities and may generate some bottom ash. Stations which burn coal create both fly ash and bottom ash. Bottom ash is the residue which accumulates on the furnace bottom, and fly ash is the lighter material which is carried over in the flue gas stream.

c. Industrial activities: nuclear powered plants. Nuclear power plants utilize a cycle similar to that used in fossil fueled power plants except that the source of heat is atomic interactions rather than the combustion of fossil fuel. Water serves as both moderator and coolant as it passes through the nuclear reactor core. In a pressurized water reactor, the heated water then passes through a separate heat exchanger where steam is produced on the secondary side. This steam, which contains radioactive materials, drives the turbines. In a boiling water reactor, steam is generated directly in the reactor core and is then piped directly to the turbine. This arrangement produces some radioactivity in the steam and therefore requires some shielding of the turbine and condenser.

d. Significant materials: nuclear powered plants. Few if any significant materials are exposed to storm water at nuclear powered steam electric facilities. Materials that are potentially exposed do not involve steam electric generating equipment, raw materials, or waste products. The materials that are exposed to storm water are office wastes and ground maintenance equipment and tools.

2. Pollutants in Storm Water Discharges Associated With Steam Electric Power Generating Facilities

Steam electric generating facilities are subject to effluent limitations guidelines that limit the number and variety of industrial activities that are included in the storm water program. Pollutants may be present in storm water as a result of outdoor activities associated steam electric power generating facilities such as: material handling and transport operations; waste disposal; and deposition of airborne particulate matter. In addition, sources of pollutants other than storm water, such

as illicit connections,[115] spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Many of the part 2 group application data submittals did not identify individual site characteristics or sources of storm water pollutants which may be responsible for pollutant loadings. In addition, because the industry has been moving toward combined fuel generating facilities, the part 2 sampling data was reviewed in the aggregate.

Table O–1 lists potential pollutant source activities and related pollutants associated with steam electric power generating facilities. The primary and largest potential source of storm water pollutants from fossil-fueled steam electric generating facilities is ash refuse piles.

TABLE O–1.—INDUSTRIAL ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS FOR STEAM ELECTRIC POWER GENERATING FACILITIES

Activity	Pollutant source	Pollutant
Above ground liquid storage tank ..	External corrosion and structural failure	Fuel, oil, heavy metals, ammonia, chlorine, sulfuric acid, sodium hydroxide, and other materials being stored.
	Installation problems	Fuel, oil, heavy metals, ammonia, chlorine, sulfuric acid, sodium hydroxide, and other materials being stored.
	Spills due to operator error	Fuel, oil heavy metals, ammonia, chlorine, sulfuric acid, sodium hydroxide, and other materials being stored.
	Failure of piping systems	Fuel, oil, heavy metals, ammonia, chlorine, sulfuric acid, sodium hydroxide, and other materials being stored.
	Leaks or spills during pumping of liquids from barges, trucks, rail cars to a storage facility.	Fuel, oil, heavy metals, ammonia, chlorine, sulfuric acid, sodium hydroxide, and other materials being stored.
Vehicle and equipment maintenance.	Parts cleaning	Oil, heavy metals, chlorinated solvents, acid/alkaline wastes, ethylene glycol.
	Spills of oil, degreasers, hydraulic fluids, transmission fluid, radiator fluids.	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol.
	Fluids replacement	Oil, arsenic, heavy metals, organics, fuel.
Fueling operations	Spills & leaks during fuel delivery	Fuel, oil, heavy metals.
	Spills caused by "topping off" fuel tanks	Fuel, oil, heavy metal.
	Leaking storage tanks	Fuel, oil, heavy metals.
	Allowing rainfall on the fuel area or storm water to run onto the fuel area.	Fuel, oil, heavy metals.
Coal handling areas	Fugitive dust emissions from coal handling	Suspended solids, copper, iron, aluminum, nickel, and trace metals
	Spills during delivery	Suspended solids, copper, iron, aluminum, nickel, and trace metals.
	Offsite tracking of coal dust	Suspended solids, copper, iron, aluminum, nickel, and trace metals.
Ash handling areas, ash landfills	Spills during transfer of ash to landfills	Suspended solids, chromium, copper, iron, zinc, oil and grease, aluminum.
	Offsite tracking of ash	Suspended solids, chromium, copper, iron, zinc, oil and grease, aluminum.
Scrapyards, reuse sites	Discarded material	Fuel, oils, heavy metals.

The ash composition from oil, on a weight percent basis, is much lower than that of coal. Oil ash rarely exceeds 0.3 percent of the input oil whereas coal ash comprises from 3 to 30 percent of the coal. In general, the ash content increases with increasing asphaltic constituents in which the sulfur acts largely as a bridge between aromatic rings.

The many elements which may appear in oil ash deposits include vanadium, sodium, and sulfur. Compounds containing these elements are found in almost every deposit in boilers fired by residual fuel oil and often constitute the major portion of these deposits. Oil ash, especially from plants using Venezuelan and certain Middle Eastern oil can contain significant amounts of nickel.

Some of the ash-forming constituents in the crude oil had their origin in animal and vegetable matter from which the oil was derived. The remainder is extraneous material resulting from contact of the crude oil with rock structures and salt brines or picked up during refining processes, storage, and transportation. Vanadium, iron, sodium, nickel, and calcium in fuel oil are common in rock strata, but elements including vanadium, nickel, zinc, and copper are believed to come from organic matter from which the petroleum was created.

The ash residue resulting from the combustion of coal is primarily derived from the inorganic matter in the coal. The chemical composition of dry bottom ash and fly ash are quite similar. The major constituents present in coal ash are silica, alumina, ferric oxide, calcium oxide, magnesium oxide, and minor amounts of sodium and potassium oxides. Other parameters which may be present include sulfur trioxide, carbon, boron, phosphorus,

[115] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at steam electric facilities is low yet it still may be applicable at some operations.

uranium, and thorium. The concentration differences can vary considerably from one site to another.[116]

When conducting their data analysis for their 1980 Development Document, the U.S. Environmental Protection Agency (EPA) found that there was no correlation between arsenic, nickel, zinc, copper, and selenium and total suspended solids, whenever their value was 30 mg/L or less.[117]

The quality of storm water runoff from coal handling areas is dependent on pH, as pH influences the release of toxic and heavy metals. Suspended solids levels result when storm water suspends coal particulates. Most of the total dissolved solids concentrations are a consequence of enhanced pyritic oxidation.

Storm water runoff from exposed sources of coal tends to be of an acid nature, primarily as a result of the oxidation of iron sulfide in the presence of oxygen and water.[118] The presence of certain acidophilic, chemoautotrophic bacteria, and a pH of 2.0 to 4.5 generally indicates storm water runoff high in iron, manganese, and total dissolved solids.[119]

Table O–2 and Table O–3 indicates the sampling data results from the part 2 group application submissions. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of outfalls sampled for each of the pollutants. Variations in the minimum and maximum values were found to be small, relative to other industrial sectors in today's proposed permit for the eight conventional pollutants. The range in values, means, and medians for the conventional pollutants sampled were typically low, except for mean total suspended solids. Less than 50 percent of the sampling facilities have submitted sampling data for part 2 of the application.

TABLE O–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER,[i] (mg/L, Except as Noted)

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	76	76	5.7	5.7	0.0	0.0	45.0	37.0	4.3	4.0	20.0	20.0	45.0	37.0
COD	76	77	104.0	69.5	0.0	0.0	1410.0	540.0	32.5	39.5	360.0	280.0	1410.0	540.0
Nitrate+nitrite nitrogen	76	77	5.8	0.8	0.0	0.0	350.0	3.9	0.4	0.5	3.7	3.2	350.0	3.9
Total Kjeldahl nitrogen	76	76	2.4	1.9	0.0	0.0	22.3	19.1	1.3	1.0	8.5	10.0	22.3	19.1
Oil & grease	88	N/A	1.4	N/A	0.0	N/A	20.0	N/A	0.0	N/A	6.0	N/A	20.0	N/A
pH (s.u.)	70	N/A	N/A	N/A	3.8	N/A	9.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total phosphorus	75	76	0.6	0.6	0.0	0.0	6.0	7.2	0.3	0.3	3.1	3.1	6.0	7.2
Tot. suspended solids	76	77	516.3	212.4	0.0	0.0	22790.0	3554.0	44.0	40.0	1200.0	810.0	22790.0	3554.0

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

TABLE O–3.—Statistics for Toxic Pollutants in Storm Water,[i] (mg/L, Except as Noted)

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Copper	65	71	0.083	0.029	0.00	0.00	2.62	.370	0.004	0.015	2.62	0.370
Arsenic	34	33	0.166	0.180	0.0	0.00	5.1	5.4	0.005	0.003	5.10	5.4
Iron	85	71	7.228	6.45	0.020	0.040	57.0	191	1.85	1.5	57.00	191.0
Lead	20	17	0.019	0.019	0.0	0.00	0.099	0.073	0.003	0.007	0.099	0.073
Manganese	6	9	0.50	0.185	0.03	0.000	2.1	0.630	0.066	0.050	2.10	0.630

Below is a discussion of data submitted by group applicants:

• *Chemical Oxygen Demand (COD)*—COD measures the total amount of oxygen necessary for oxidation. COD is an effective indicator of levels of biologically resistant organic substances. Higher COD levels, for example, may be attributed to the presence of biologically resistant organics, such as oil and grease. COD data submitted in the part 2 applications from steam electric power generating facilities indicate the following:

—The mean concentrations for grab and composite samples were 104.0 mg/L and 69.5 mg/L, respectively.
—The median concentrations for grab and composite samples were 32.5 mg/L and 39.5 mg/L, respectively.
—The 95th percentile concentration (i.e., 95 percent of the values are below) for grab and composite samples were approximately 360 mg/L and 280 mg/L, respectively.
—The 99th percentile concentration (i.e., 99 percent of the values are below) for grab and composite samples were 1,410 mg/L and 540 mg/L, respectively.

These mean and median COD concentrations are within the recommended load estimates for storm water runoff from residential and commercial areas.[120] However, the maximum COD level exceeds the NURP recommendations for load estimates.

[116] EPA. Effluent Guidelines Division. "Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Category." September 1980. (EPA 440/1–80/029-b). Page 131.

[117] EPA. Effluent Guidelines Division. "Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Category." September 1980. (EPA 440/1–80/029-b). Page 136.

[118] EPA. Effluent Guidelines Division. "Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Category." September 1980. (EPA 440/1–80/029-b). Page 138.

[119] EPA. Effluent Guidelines Division. "Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Category." September 1980. (EPA 440/1–80/029-b). Page 138.

[120] EPA. December 1983. "Results of the National Urban Runoff Program."

• *Oil and Grease*—There are several sources of oil and grease from steam electric power generating facilities. These sources include unloading/loading areas; vehicle/equipment maintenance and cleaning; and outdoor storage of vehicles, equipment and castings. Oil and grease emulsions are detrimental to aquatic organisms and inhabitants because: (1) Deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

Oil and grease data submitted in part 2 applications for steam electric power generating facilities indicate the following:

—The mean concentration was 1.4 mg/L
—The median concentration was 0.0 mg/L
—The 95th percentile concentration (i.e., 95 percent of the values are below) was 6.0 mg/L
—The 99th percentile concentration (i.e., 99 percent of the values are below) was 20.0 mg/L.

• *pH*—pH is a measure of the acidity or alkalinity of a discharge. On the pH scale ranging from zero to fourteen, a value of seven represents neutral conditions in which the concentrations of hydrogen and hydroxyl ions are equal. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions.

The pH level is easily measured and is an indication of potential environmental impacts. Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change. Part 2 applications from steam electric power generating facilities indicated that the minimum pH value was 3.8 standard units.

• *Total Suspended Solids (TSS)*—TSS is associated with steam electric power generating facilities because sites have exposure to significant materials like coal and refuse piles. Part 2 of the applications indicated high TSS levels. Suspended solids increase the turbidity of water allowing less light to penetrate the water, thereby reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments.

These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish. TSS data submitted in the part 2 applications for steam electric power generating facilities indicate the following:

—The mean concentrations for grab and composite samples were 516.3 mg/L and 212.4 mg/L, respectively
—The median concentrations for grab and composite samples were 44.0 mg/L and 40.0 mg/L, respectively
—The 95th percentile concentration (i.e., 95 percent of the values are below) for grab and composite samples were 1,200 and 810, respectively
—The 99th percentile concentration (i.e., 99 percent of the values are below) for grab and composite samples were 22,790 mg/L and 5,554 mg/L, respectively.

Storm Water Pollution Prevention Plan Requirements

The conditions that apply to steam electric power generating facilities are founded on the requirements set forth in the baseline general permit for storm water discharges from industrial activities finalized on September 9, 1992 (57 FR 41236). The discussion that follows only addresses conditions that differ from those required in the baseline permit. There are no additional pollution prevention requirements beyond the baseline for nuclear powered steam electric generating facilities.

a. Description of pollutant sources. Under the description of pollutant sources in the storm water pollution prevention plan requirements, permittees are required to include a site map of the facility. The areas required to be identified on the site map now also include the following: Landfills, treatment ponds, scrap yards, general refuse areas, locations of short and long term storage of general materials, and the location of stock pile areas. EPA believes this is appropriate since these areas may potentially be significant sources of pollutants to storm water.

b. Measures and controls. Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

(1) Fugitive dust emissions. The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The facility shall establish procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.

(2) Delivery vehicles. The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the facility must:

• Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container.

• Develop procedures to control leakage or spillage from vehicles or containers, and ensure that proper protective measures are available for personnel and environment.

(3) Fuel oil unloading areas. The plan must describe measures that prevent or minimize contamination of storm water runoff from fuel oil unloading areas. At a minimum the facility must use the following measures or their equivalent:

• Use containment curbs in unloading areas.

• During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.

• Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors).

(4) Chemical loading/unloading areas. The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. At a minimum the permittee must use the following measures or their equivalent:

• Use containment curbs at chemical loading/unloading areas to contain spills.

• During deliveries station personnel familiar with spill prevention and response procedures must be present to

ensure that any leaks or spills are immediately contained and cleaned up.

Where practicable chemical loading/unloading areas should be covered, and chemicals should be stored indoors.

(5) Miscellaneous loading/unloading areas. The plan must describe measures that prevent or minimize the contamination of storm water runoff from loading and unloading areas. The facility may consider covering the loading area, minimizing storm water runon to the loading area by grading, berming, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be controlled in existing containment and flow diversion systems.

(6) Liquid storage tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from above ground liquid storage tanks. At a minimum the facility must employ the following measures or their equivalent:

- Use protective guards around tanks.
- Use containment curbs.
- Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors)
- Use dry cleanup methods.

(7) Large bulk fuel storage tanks. The plan must describe measures that prevent or minimize contamination of storm water runoff from liquid storage tanks. At a minimum the facility must employ the following measures or their equivalent:

- Comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC)
- Containment berms.

(8) The plan must describe measures to reduce the potential for an oil or chemical spill, or reference the appropriate section of their SPCC plan. At a minimum the structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on a weekly basis. All repairs deemed necessary based on the findings of the inspections will be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

(9) Oil bearing equipment in switchyards. The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas. The facility may consider level grades and gravel surfaces to retard flows and limit the spread of spills; collection of storm water runoff in perimeter ditches.

(10) Residue hauling vehicles. All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load covers or adequate gate sealing, or with poor body or container conditions must be repaired as soon as practicable.

(11) Ash loading areas. Plant procedures shall be established to reduce and/or control the tracking of ash or residue from ash loading areas including, where practicable, requirements to clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before each loaded vehicle departs.

(12) Areas adjacent to disposal ponds or landfills. The plan must describe measures that prevent or minimize contamination of storm water runoff from areas adjacent to disposal ponds or landfills. The facility must develop procedures to:

- Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles.
- Reduce ash residue on exit roads leading into and out of residue handling areas.

(13) Landfills, scrapyard, general refuse sites. For landfills, scrapyards, and general refuse sites, the permittee shall use the applicable Best Management Practices outlined in Parts XI.L. and XI.N. of today's proposed (Storm Water Discharges From Landfills, Land Application Sites, and Open Dumps and Scrap and Waste Material Processing and Recycling Facilities, respectively).

(14) Maintenance activities. For vehicle maintenance activities performed on the plant site, the permittee shall use the applicable Best Management Practices outlined in Part XI.Q. of today's proposed permit (Storm Water Discharges From Vehicle Maintenance or Equipment Cleaning Operations at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, or the United States Postal Service).

(15) Material storage areas. The plan must describe measures that prevent or minimize contamination of storm water from material storage areas (including areas used for temporary storage of miscellaneous products and construction materials stored in lay down areas). The facility may consider flat yard grades, runoff collection in graded swales or ditches, erosion protection measures at steep outfall sites (e.g., concrete chutes, riprap, stilling basins), covering lay down areas, storing the materials indoors, covering the material with a temporary covering made of polyethylene, polyurethane, polypropylene, or hypalon. Storm water runon may be minimized by constructing an enclosure or building a berm around the area.

Based on information provided in part 1 of the group application process, the proposed management practices are commonly used at many steam electric power generating facilities. EPA believes that the incorporation of management practices to accomplish the objectives described above, in conjunction with the baseline requirements, will substantially reduce the potential for these activities and areas to significantly contribute to the pollution of storm water discharges. EPA believes that these requirements provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities.

(16) Inspections. Under the inspection requirements of the storm water pollution prevention plan elements, this section proposes that in addition to the comprehensive site evaluation required under Part VIII.C.4. of today's proposed permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a monthly basis. The following areas shall be included in the inspection: coal handling areas, fueling areas, loading/unloading areas, switchyards, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks and long term and short term material storage areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained onsite.

The purpose of the inspections is to check on the implementation of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis.

4. Pollutant Control Measures Required Through Other EPA Programs. The Agency recognizes that other EPA programs address pollution prevention at steam electric power generating facilities. The Oil Pollution Prevention Program (40 CFR part 112) has established procedures to prevent the discharge of oil from nontransportation related onshore and offshore facilities. This program requires owners or operators of onshore and offshore facilities to prepare a Spill Prevention

Control and Countermeasure Plan (SPCC Plan) for their facility if they could reasonably be expected to discharge oil, into or upon the navigable waters of the United States or adjoining shorelines, in quantities that:

- Violate applicable water quality standards, or;
- Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Some major requirements of the SPCC plan include the following:

- A description of spill and corrective actions taken.
- Appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching a navigable water course. If installation of structures to prevent discharged oil from reaching the navigable waters is not practicable, the owner or operator should clearly demonstrate such impracticability and provide a spill contingency plan and a written commitment of manpower, equipment, and materials required to expeditiously control and remove oil.
- Drainage from diked storage areas should be restrained by valves or other positive means to prevent a spill or excessive leakage of oil into the drainage system or in-plant effluent treatment system.
- Flapper type drain valves should not be used to drain diked areas.
- Plant drainage systems from undiked areas should, if possible, flow into ponds, lagoons or catchment basins designed to retain oil or return it to the facility.
- If plant drainage is not engineered as above, the final discharge of all in-plant ditches should be equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the plant.
- Requirements for bulk storage tanks include, but are not limited to, the following:

—Material and construction of tanks need to be compatible with the material stored and conditions of storage such as pressure, temperature, etc.
—Secondary containment should be provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation.
—Drainage of rainwater from the diked area into a storm drain or an effluent discharge that empties into an open in-plant water course, lake or pond and bypassing the in-plant treatment system may be acceptable if: bypass valve is normally sealed closed; inspection of runoff rain water ensures compliance with applicable water quality standards and will not cause a harmful discharge and adequate records are kept.
—Above-ground tanks should be subject to periodic integrity testing.
—New and old tank installations should, as practicable, be fail safe engineered

Under the Resource Conservation and Recovery Act (RCRA) specific requirements have been established which address generators of hazardous wastes. Regulations have been developed which address the accumulation of hazardous waste onsite prior to transport to a hazardous waste disposal facility. These regulations address proper storage of hazardous wastes, emergency planning, and training personnel in proper handling procedures for hazardous wastes.

5. Numeric Effluent Limitations

Coal pile runoff is subject to the effluent guidelines described in Part VI.F. of this factsheet. However, steam electric generating facilities must comply with the requirement of Part VI.F. immediately upon permit issuance. Steam electric generating facilities are not permitted to take 3 years to meet this requirement.

6. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that steam electric power generating facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires steam electric power generating facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table O–4. The pollutants listed in Table O–4 were found to be above levels of concern for a significant portion of steam electric power generating facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at levels of concern from steam electric power generating facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from steam electric power generating facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table O–4. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE O–4.—MONITORING REQUIREMENTS FOR STEAM ELECTRIC POWER GENERATING FACILITIES

Pollutants of concern	Cut-off concentration
Total recoverable copper ..	0.009 mg/L
Total recoverable aluminum.	0.75 mg/L
Total recoverable arsenic .	0.00018 mg/L
Total recoverable iron	0.3 mg/L
Total recoverable lead	0.0337 mg/L
Total recoverable manganese.	0.05 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table O–4, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table O–4, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE O–5.—SCHEDULE OF MONITORING

2nd year of permit coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table O–4, then quarterly sampling is required during the fourth year of the permit • If average concentration is less than or equal to the value listed in Table O–4, then no further sampling is required for that parameter.
4th year of permit coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year two of the permit is greater than the value listed in Table O–4. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table O–4 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table O–4. Facilities which achieve average discharge concentrations which are less than or equal to the values in Table O–4 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities which do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within three months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at steam electric generating facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that whenever practicable the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: The

examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained on site with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity. These notices set out requirements for annual monitoring for several parameters for discharges from steam electric power generating facilities. These notices specifically require coal-fired steam electric facilities to monitor their storm water discharges for oil and grease, pH, total suspended solids, total recoverable copper, total recoverable nickel, and total recoverable zinc. In addition, the baseline general permit established monitoring requirements for oil-fired steam electric power generating facilities. The baseline specifically requires oil-fired steam electric facilities to monitor their storm water discharges for oil and grease, chemical oxygen demand, total suspended solids, pH, and any pollutant limited in an effluent guideline to which the facility is subject. Today's proposed permit contains monitoring requirements different than those in the baseline permit. EPA requests comment upon the difference between the monitoring requirements set out for steam electric power generating facilities in the September 1992, General Permits and those required in today's proposed permit.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.O.6 of today's proposed fact sheet.

a. Monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittee with facilities identified in Parts XI.O.5.a.(1) through XI.O.5.a.(2) below must monitor storm water discharges for the listed parameters on a frequency identified in the applicable paragraph, except as provided in VI.C. (Sampling Waiver and Representative Discharge). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

(1) Storm water discharges from the industrial portions of coal-fired, and coal/oil-fired steam electric power generating facilities shall monitor for the following parameters (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 Code of Federal Regulations (CFR) part 423—which are not eligible for coverage under this permit):

TABLE O–6.—MONITORING REQUIREMENTS FOR COAL-FIRED AND COAL/OIL-FIRED STEAM ELECTRIC POWER GENERATING FACILITIES

Parameter	Units	Frequency	Sample Type[1]
Total flow	mg	Quarterly	Estimate.
Oil and grease	mg/L	Quarterly	Grab.
pH	s.u.	Quarterly	Grab.
Total suspended solids (TSS)	mg/L	Quarterly	Grab & Composite.
Total recoverable nickel[2]	mg/L	Quarterly	Grab & Composite.
Total recoverable zinc[2]	mg/L	Quarterly	Grab & Composite.
Total recoverable copper[2]	mg/L	Quarterly	Grab & Composite.
Chemical oxygen demand[3] (COD)	mg/L	Quarterly	Grab & Composite.

[1] For discharges from holding ponds or other impoundments with a retention period greater than 24 hours (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected), a minimum of one grab sample may be taken in lieu of a grab sample and a composite sample.

[2] In addition to monitoring for flow, oil and grease, and TSS, storm water discharges which drain from coal handling sites (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR Part 423—which are not eligible for coverage under this permit) shall be monitored for total recoverable copper, total recoverable nickel, and total recoverable zinc.

[3] Chemical Oxygen Demand shall be monitored at Steam Electric Power Generating Facilities which utilize coal and oil in their production [illegible].

In addition to the above sampling parameters the permittee is required to monitor storm water discharges for any pollutant limited in an effluent guideline to which the facility is subject. Sampling frequency shall be quarterly, and sample type shall be grab and composite.

Monitoring must be conducted at least once in each designated period unless there is insufficient rainfall or snowmelt to produce a runoff event.

Sampling shall be conducted in each of the following periods for the purposes of meeting the monitoring requirements of this permit: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

(2) Storm water discharges from the industrial portions of oil-fired, gas-fired, or oil/gas-fired steam electric power generating facilities shall monitor for the following parameters:

TABLE O–7.—MONITORING REQUIREMENTS FOR OIL-FIRED, GAS-FIRED, AND OIL/GAS-FIRED STEAM ELECTRIC POWER GENERATING FACILITIES

Parameter	Units	Frequency	Sample type[1]
Total flow	MG	Quarterly	Estimate.
Oil & grease	mg/L	Quarterly	Grab.
pH	mg/L	Quarterly	Grab.
Total suspended solids (TSS)	mg/L	Quarterly	Grab & Composite.
Chemical oxygen demand (COD)	mg/L	Quarterly	Grab & Composite.

[1] For discharges from holding ponds or other impoundments with a retention period greater than 24 hours (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected), a minimum of one grab sample may be taken in lieu of a grab sample and a composite sample.

In addition to the above sampling parameters, the permittee is required to monitor storm water discharges for any pollutant limited in an effluent guideline to which the facility is subject. Sampling frequency shall be quarterly, and sample type shall be grab and composite.

Monitoring must be conducted at least once in each designated period unless there is insufficient rainfall or snow-melt to produce a runoff event. Sampling shall be conducted in each of the following periods for the purposes of meeting the monitoring requirements of this permit: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

b. Sample type—(1) All samples shall be collected from a discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 48 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 60 minutes of the discharge. If the collection of a grab sample during the first 60 minutes is impracticable, a grab sample can be taken during the first 3 hours of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 60 minutes was impracticable.

(2) The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquot taken in each hour of discharge for the entire discharge or for the first 3 hours of the discharge, with each aliquot being separated by a minimum period of 15 minutes.

c. Permittee with facilities identified in Part XI.O.7.a. (Monitoring Requirements) are not required to submit monitoring results, unless required in writing by the Director. However, permittee must retain monitoring results in accordance with Part VI.E.4. (Retention of Records).

Quarterly visual inspections of a storm water discharge from each outfall are required. The visual inspection of storm water outfalls shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

P. Storm Water Discharges Associated With Industrial Activity From Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United States Postal Service Transportation Facilities

1. Discharges Covered Under This Section

Special conditions have been developed for ground transportation facilities and rail transportation facilities that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) and equipment cleaning operations. Vehicle and equipment maintenance is a broad term used to include the following activities: vehicle and equipment fluid changes, mechanical repairs, parts cleaning, sanding, refinishing, painting, fueling, locomotive sanding (loading sand for traction), storage of vehicles and equipment waiting for repair or maintenance, and storage of the related materials and waste materials, such as oil, fuel, batteries, tires, or oil filters. Equipment cleaning operations include areas where the following types of activities take place: vehicle exterior wash down, interior trailer washouts,

tank washouts, and rinsing of transfer equipment. Any storm water discharges from facilities where such activities take place are subject to the special conditions described in Part XI.P. of today's proposed permit.

The conditions proposed in this section apply to storm water discharges from vehicle and equipment maintenance shops or cleaning operations located on any of the industrial facilities covered under the storm water application regulations (40 CFR 122.26) and applying for coverage under this permit.

As background, the storm water application regulations define storm water discharge associated with industrial activity at 40 CFR 122.26(b)(14). Category (viii) of this definition includes transportation facilities classified as Standard Industrial Classification (SIC) codes 40, 41, 42 (except 4221–25), 43, 44, 45, and 5171 that have vehicle and equipment maintenance shops, equipment cleaning operations, or airport deicing operations. The category further states that only those portions of the facility that are either involved in vehicle and equipment maintenance (including vehicle and equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations are associated with industrial activity. The facilities that would potentially be covered by this section of today's proposed permit are commonly assigned SIC codes 40, 41, 42, 43, and 5171, or any other SIC code described in the eligibility section of today's proposed permit.

SIC code 40 includes facilities primarily engaged in furnishing transportation by line-haul railroad, and switching and terminal establishments. The following types of facilities are examples of those covered under SIC code 40: Electric railroad line-haul operation, railroad line-haul operation, interurban railways, beltline railroads, logging railroads, railroad terminals, and stations operated by railroad terminal companies.

SIC code 41 includes facilities primarily engaged in furnishing local and suburban transportation, such as those providing transportation in and around a municipality by bus, rail, or subway. The following types of facilities are examples of those covered under SIC code 41: bus line operation, airport transportation service (road or rail), cable car operation, subway operation, ambulance service, sightseeing buses, van pool operation, limousine rental with drivers, taxicab operation, and school buses not operated by the educational institution.

SIC code 42 includes facilities providing local or long-distance trucking, transfer, and/or storage services. The following types of facilities are examples of those covered under SIC code 42: hauling by dump truck, trucking timber, contract mail carriers, furniture moving, garbage collection without disposal, over-the-road trucking, long distance trucking, and freight trucking terminal.

SIC code 43 includes all establishments of the United States Postal Service.

SIC code 5171 includes establishments engaged in the wholesale distribution of crude petroleum and petroleum products from bulk liquid storage facilities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Pollutants Found in Storm Water Discharges From Vehicle and Equipment Maintenance and Cleaning Operations

The following table lists potential pollutant source activities that commonly take place at vehicle and equipment maintenance and equipment cleaning operations.

TABLE P–1.—POTENTIAL POLLUTANT SOURCE ACTIVITIES AT VEHICLE AND EQUIPMENT MAINTENANCE

Activity	Pollutant source	Pollutant
Fueling	Spills and leaks during fuel delivery	Fuel, oil, heavy metals.
	Spills caused by "topping off" fuel tanks	Fuel, oil, heavy metals.
	Rainfall falling on the fuel area or storm water running onto the fuel area.	Fuel, oil, heavy metals.
	Hosing or washing down fuel area	Fuel, oil, heavy metals.
	Leaking storage tanks	Fuel, oil, heavy metals.
Vehicle and equipment maintenance.	Parts cleaning	Chlorinated solvents, oil, heavy metals, acid/alkaline wastes.
	Waste disposal of greasy rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluid, radiator fluids, degreasers.	Oil, heavy metals, chlorinated solvents, acid/alkaline wastes, ethylene glycol.
	Spills of oil, degreasers, hydraulic fluids, transmission fluid, radiator fluids.	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol.
	Fluids replacement, including oil, hydraulic fluids, transmission fluid, radiator fluids.	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol.
Outdoor vehicle and equipment storage and parking.	Leaking vehicle fluids including hydraulic lines and radiators, leaking or improperly maintained locomotive on-board drip collection systems, brake dust.	Oil, hydraulic fluids, arsenic, heavy metals, organics, fuel.
Painting areas	Paint and paint thinner spills	Paint, spent chlorinated solvents, heavy metals.
	Spray painting	Paint solids, heavy metals.
	Sanding or paint stripping	Dust, paint solids, heavy metals.

TABLE P–1.—POTENTIAL POLLUTANT SOURCE ACTIVITIES AT VEHICLE AND EQUIPMENT MAINTENANCE—Continued

Activity	Pollutant source	Pollutant
	Paint clean-up	Paint, spent chlorinated solvents, heavy metals.
Railroad locomotive sanding	Loading traction sand on locomotives	Sediment.
Vehicle or equipment washing areas.	Washing or steam cleaning	Oil, detergents, heavy metals, chlorinated solvents, phosphorus, salts, suspended solids.
Liquid storage in above ground storage.	External corrosion and structural failure	Fuel, oil, heavy metals, materials being stored.
	Installation problems	Fuel, oil, heavy metals, materials being stored.
	Spills and overfills due to operator error	Fuel, oil, heavy metals, materials being stored.
	Failure of piping systems (pipes, pumps, flanges, couplings, hoses, and valves).	Fuel, oil, heavy metals, materials being stored.
	Leaks or spills during pumping of liquids from barges, trucks, or rail cars to a storage facility.	Fuel, oil, heavy metals, materials being stored.
Cold weather activities	Salt application	Sodium chloride.
	Dirt/ash application	Suspended solids, heavy metals.
Improper connections to storm sewer.	Process wastewater	Dependent on operations.
	Sanitary water	Bacteria, biochemical oxygen demand (BOD), suspended solids.
	Floor drains	Oil, heavy metals, chlorinated solvents, fuel, ethylene glycol.
	Vehicle washwaters	Oil, detergents, metals, chlorinated solvents, phosphorus, suspended solids.
	Radiator flushing wastewater	Ethylene glycol.
	Leaky underground storage tanks	Materials stored or previously stored.

Sources: EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Refinishing Industry." EPA/625/7–91/016.

EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Repair Industry." EPA/625/7–91/013.

EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.

EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

U.S. Postal Service. May 1992. "NPDES/Storm Water Guide." AS–554.

The part 2 group application data were examined based on SIC code classification. Tables P–2 through P–7 present summary statistics on each of the SIC code groupings.

TABLE P–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES ASSIGNED SIC MAJOR GROUP 40[i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	116	105	11.3	9.3	0.0	0.0	193.0	155.0	6.0	5.0	34.0	28.0	85.0	50.0
COD	117	102	318.1	189.5	0.0	0.0	11,800.0	5,470.0	118.0	89.0	781.0	489.0	1,840.0	752.0
Nitrate + Nitrite Nitrogen	118	102	1.59	1.41	0.00	0.000	19.50	19.00	0.820	0.775	6.07	4.26	9.76	7.19
Total Kjeldahl Nitrogen	118	102	3.75	2.48	0.00	0.000	72.00	16.30	1.500	1.400	13.40	5.80	44.00	13.00
Oil & Grease	118	N/A	9.5	N/A	0.0	N/A	460.0	N/A	0.0	N/A	27.0	N/A	160.0	N/A
pH	114	N/A	N/A	N/A	3.6	N/A	10.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	118	102	1.47	0.92	0.00	0.000	23.30	8.52	0.540	0.450	8.10	3.05	13.20	5.02
Total Suspended Solids	118	102	517	249	0	0	4,660	2,820	172	90	2,600	917	3,910	1,780

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

TABLE P–3.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES ASSIGNED SIC MAJOR GROUP 41[i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	50	50	15.9	12.3	0.0	0.0	235.3	104.8	5.5	5.3	48.0	58.0	235.3	104.8
COD	51	50	51.4	35.3	0.0	0.0	376.0	216.0	18.5	18.4	261.0	139.0	376.0	216.0
Nitrate + Nitrite Nitrogen	50	48	14.39	7.66	0.000	0.10	181.4	104.00	1.79	1.30	71.00	39.00	181.40	104.00
Total Kjeldahl Nitrogen	49	49	4.22	2.37	0.00	0.00	61.26	15.74	1.82	1.20	8.00	8.10	61.26	15.74
Oil & Grease	56	N/A	47.1	N/A	0.0	N/A	771.0	N/A	8.0	N/A	252.0	N/A	771.0	N/A
pH	55	N/A	N/A	N/A	4.7	N/A	9.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	52	50	0.92	0.85	0.00	0.00	7.50	7.00	0.33	0.32	3.90	2.91	7.50	7.00

TABLE P–3.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES ASSIGNED SIC MAJOR GROUP 41 [i]—Continued

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp [ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Total Suspended Solids	50	51	246	137	0	0	2320	802	70	41	998	600	2320	802

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

TABLE P–4.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES ASSIGNED SIC MAJOR GROUP 42 [i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp [ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	236	211	16.5	9.1	0.0	0.0	510	66.0	7.0	5.6	60.0	30.0	180.0	56.0
COD	242	210	146.1	82.0	0.0	0.0	1800.0	600.0	79.0	50.5	580.0	230.0	1074.0	509.0
Nitrate+Nitrite Nitrogen	234	210	1.47	0.72	0.00	0.00	90.80	60.50	0.61	0.49	3.96	4.64	13.40	15.65
Total Kjeldahl Nitrogen	241	210	2.26	1.47	0.00	0.00	24.00	15.00	1.40	1.10	6.80	3.60	17.10	6.70
Oil & Grease	245	N/A	14.0	N/A	0.0	N/A	1340.0	N/A	2.8	N/A	29.0	N/A	110.0	N/A
pH	215	N/A	N/A	N/A	2.6	N/A	9.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	238	208	1.09	0.61	0.00	0.00	37.40	6.80	0.32	0.29	2.80	1.90	14.00	6.16
Total Suspended Solids	242	210	466	360	0	0	4700	20900	159	N/A	1890	1200	3400	1800

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

TABLE P–5.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES ASSIGNED SIC MAJOR GROUP 42 [i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp [ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	22	22	8.1	9.2	0.0	0.0	25.0	62.0	5.5	4.8	20.0	32.0	25.0	62.0
COD	22	22	51.4	33.8	5.0	0.0	350.0	190.0	26.5	19.5	200.0	80.0	350.0	190.0
Nitrate+Nitrite Nitrogen	22	22	0.52	0.75	0.11	0.07	1.30	1.80	0.40	0.61	1.20	1.60	1.30	1.80
Total Kjeldahl Nitrogen	20	22	1.80	1.91	0.0	0.0	11.00	11.00	1.05	0.97	5.10	0.00	11.00	11.00
Oil & Grease	22	N/A	5.4	N/A	0.0	N/A	21.0	N/A	4.4	N/A	19.0	N/A	21.00	N/A
pH	22	N/A	N/A	N/A	0.1	N/A	8.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	22	22	0.46	0.47	0.00	0.00	2.50	3.40	0.28	0.20	2.10	3.00	2.50	3.40
Total Suspended Solids	21	22	16	13	0	0	77	86	41	59	72	77	86	

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

TABLE P–6.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES CLASSIFIED AS SIC MAJOR GROUP 5171 [i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp [ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	11	10	27.7	10.2	1.3	0.0	120.0	31.0	0.0	9.0	120.0	31.0	120.0	31.0
COD	11	10	118.3	75.9	15.0	9.3	390.0	200.0	94.0	60.5	390.0	200.0	390.0	200.0
Nitrate + Nitrite Nitrogen	11	10	1.07	0.74	0.0	0.0	5.1	2.9	0.35	0.39	5.10	2.90	5.10	2.90
Total Kjeldahl Nitrogen	10	9	2.60	2.02	0.00	0.00	5.80	4.60	2.80	2.00	5.80	4.60	5.80	4.60
Oil & Grease	11	N/A	8.8	N/A	0.0	N/A	28.0	N/A	5.4	N/A	28.0	N/A	28.0	N/A
pH	10	N/A	N/A	N/A	6.0	N/A	9.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	11	10	0.61	0.45	0.00	0.04	4.60	2.00	0.12	0.27	4.60	2.00	4.60	2.00
Total Suspended Solids	11	10	253	151	6	0	1090	560	105	93	1090	560	1090	560

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

TABLE P–7.—STATISTICS FOR CONVENTIONAL POLLUTANTS, MG/L FOR FACILITIES CLASSIFIED AS ANY SIC MAJOR GROUPS OTHER THAN 40, 41, 42, 43, OR 5171[i]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	400	375	17.1	11.1	0.0	0.0	510.0	123.0	8.0	6.0	60.5	41.0	150.0	78.0
COD	408	374	135.2	85.6	0.0	0.0	2360.0	2640.00	64.0	48.0	498.0	250.0	1074.0	500.0
Nitrate + Nitrite Nitrogen	399	372	2.99	1.99	0.00	0.000	181.40	104.00	0.610	0.515	9.00	5.10	71.00	39.00
Total Kjeldahl Nitrogen	404	372	2.69	2.05	0.00	0.000	81.26	100.00	1.400	1.140	7.70	6.30	23.50	15.00
Oil & Grease	418	N/A	16.4	N/A	0.0	N/A	1340.0	N/A	2.8	N/A	41.0	N/A	252.0	N/A
pH	380	N/A	N/A	N/A	0.1	N/A	9.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	405	372	1.12	0.73	0.00	0.000	37.40	26.20	0.330	0.295	3.90	2.91	14.20	5.80
Total Suspended Solids	406	375	503	454	0	0	34367	65733	104	67	1890	1100	3550	2433

[i] Applicants that did not report the units of measurements for the reported values were not included in these statistics.
[ii] Composite samples.

In comparing the data with existing State NPDES storm water permit limitations and storm water effluent guidelines (see Table P–8), EPA found the following pollutants to be of concern for all SIC code groupings: chemical oxygen demand, oil and grease, pH, and total suspended solids.

TABLE P–8.—STORM WATER POLLUTANTS OF CONCERN COMPARISONS

[all values in mg/L except where noted]

Parameter	MO permit[i] (daily max/ monthly avg)	AL permit[ii] (daily max/ monthly avg)	OR permit[iii] (Daily Max)	Louisiana storm water quality standard (Daily Max)	NURP—residential or commercial land use	Storm Water Effluent Guidelines (daily max/monthly avg)
BOD	.....	.....	.....	.....	12	.....
COD	.....	.....	.....	[iv]100	82	[v]200/100
NO2 + NO3	.....	.....	.....	.....	0.86	.....
TKN	.....	.....	.....	.....	1.90	.....
O & G	15/10	15/10	10	[vi]15		
pH	.....	.....	6-9 s.u.	.....	.....	[vii]6-9 s.u.
Total P	.....	.....	1.0	.....	0.42	[viii]105/35
TSS	100/50	50/30	.....	.....	180	[ix]20/10
BETX	.....	200/200µg/L	.....	.....	.....	.....

[i] Draft NPDES permit by the State of Missouri Department of Natural Resources for firms engaged in motor freight transportation and warehousing (permit No. MO–S240000).
[ii] Draft NPDES permit by Alabama Department of Environmental Management for storm water discharges associated with vehicle and equipment storage, maintenance, repair, and washing (permit no. ALG140000).
[iii] Final NPDES permit issued by the State of Oregon, Department of Environmental Quality for transportation facilities classified as SIC codes 40, 41, 42 (except 4221–4225), 43, 44, 45, and 5171 (permit no. 1200–T)
[iv] Standard for COD applies to runoff from Oil & Gas Exploration and Production Facilities (LAC 33:IX.708).
[v] Ore Mining and dressing (40 CFR Part 440, Subpart C).
[vi] Standard applies to all storm water discharges (LAC 33:IV.708).
[vii] Cement Manufacturing (40 CFR Part 411); Fertilizer Manufacturing (40 CFR Subpart B); Petroleum Refining (40 CFR Part 419); Steam Electric Power Generating (40 CFR Part 423); Coal Mining (40 CFR Part 434); Mineral Mining (40 CFR Part 436); Ore Mining and Dressing (40 CFR Part 440); and Paving and Roofing Materials (40 CFR Part 443).
[viii] Fertilizer Manufacturing 40 CFR Part 418 Subpart A.
[ix] Mineral Mining (40 CFR Part 436, Subpart AL).

Table P–9 lists the pollutant sources for each of the main pollutants of concern.

TABLE P–9.—PARAMETER/SOURCE RELATIONSHIPS

Parameter	Pollutant Sources
Chemical oxygen demand (COD).	Ethylene glycol, fuels, paints, solvents, degreasers.

TABLE P–9.—PARAMETER/SOURCE RELATIONSHIPS—Continued

Parameter	Pollutant Sources
Oil & grease ..	Used oil, fuels, lubricating fluids, fuel oil, transmission fluid.

TABLE P–9.—PARAMETER/SOURCE RELATIONSHIPS—Continued

Parameter	Pollutant Sources
pH	Battery acids, detergents, other acidic or alkaline materials.
Total suspended solids (TSS).	Bare soils, tracked sediment, vehicle washwaters.
MBAs (surfactants).	Washwaters, leaking detergent storage.

The mean and median pollutant levels associated with facilities providing trucking, transfer, and/or storage services (SIC 42) and U.S. Postal Service facilities (SIC 43) were lower than those associated with the other ground transportation groups. However, there were significant differences between the mean and the median for most parameters, indicating a high variability in the data. On the whole, these three groups, in their part 1 group applications, described more storm water management practices at their facilities than the other ground transportation groups.

3. Options for Controlling Pollutants.

The measures commonly implemented to reduce pollutants in storm water associated with vehicle and equipment maintenance and equipment cleaning operations are generally uncomplicated practices. The following table identifies best management practices (BMPs) associated with different activities that routinely take place at vehicle and equipment maintenance and equipment cleaning operations.

TABLE P–10.—COMMON STORM WATER BEST MANAGEMENT PRACTICES FOR ACTIVITIES AT VEHICLE AND EQUIPMENT MAINTENANCE

Activity	BMPs
Fueling	Use spill and overflow protection.
	Minimize runon of storm water into the fueling area by grading the area such that storm water only runs off.
	Reduce exposure of the fuel area to storm water by covering the area.
	Use dry cleanup methods for fuel area rather than hosing the fuel area down.
	Use proper petroleum spill control.
	Perform preventive maintenance on storage tanks to detect potential leaks before they occur.
	Inspect the fueling area to detect problems before they occur.
	Train employees on proper fueling techniques.
Vehicle and equipment maintenance	Maintain an organized inventory of materials used in the maintenance shop.
	Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.
	Label and track the recycling of waste material (e.g., used oil, spent solvents, batteries).
	Drain oil filters before disposal or recycling.
	Drain and contain all fluids from wrecked vehicles and "parts" cars.
	Store cracked batteries in a nonleaking secondary container.
	Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
	Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
	Plug floor drains that are connected to the storm or sanitary sewer; if necessary, install a sump that is pumped regularly.
	Inspect the maintenance area regularly for proper implementation of control measures.
	Train employees on proper waste control and disposal procedures.
Outdoor vehicle and equipment storage and parking.	Use drip pans under all vehicles and equipment waiting for maintenance.
	Cover the storage area with a roof.
	Inspect the storage yard for filling drip pans and other problems regularly.
	Train employees on procedures for storage and inspection items.
Locomotive sanding areas	Cover sand storage piles.
	Install sediment traps.
	Install curbs or dikes around storage piles to minimize storm water runon.
Painting areas	Keep paint and paint thinner away from traffic areas to avoid spills.
	Spray paint in an Occupational Safety and Health Act (OSHA) approved hood.
	Use effective spray equipment that delivers more paint to the target and less over-spray.
	Avoid sanding in windy weather and collect and dispose of waste properly.
	Recycle paint, paint thinner, and solvents.
	Inspect painting procedures to ensure that they are conducted properly.
	Train employees on proper sanding, painting, and spraying techniques.
Vehicle or equipment washing areas	Avoid washing parts or equipment outside.
	Use phosphate-free biodegradable detergents.
	Designate an area for cleaning activities.
	Contain and recycle washwaters.
	Ensure that washwaters drain well.
	Inspect cleaning area regularly.
	Train employees on proper washing procedures.
Liquid storage in above ground storage	Maintain good integrity of all storage containers.
	Install safeguards (such as diking or berming) against accidental releases at the storage area.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Cold weather activities	Minimize salt application.
	Use uncontaminated dirt or ash, if use is necessary.
	Train employees on proper salt, dirt, sand, or ash application.

TABLE P–10.—COMMON STORM WATER BEST MANAGEMENT PRACTICES FOR ACTIVITIES AT VEHICLE AND EQUIPMENT MAINTENANCE—Continued

Activity	BMPs
Improper connections to storm sewer	Plug all floor drains connected to sanitary or storm sewer or if connection is unknown. Alternatively, install a sump that is pumped regularly. Perform smoke or dye testing to determine if interconnections exist between sanitary water system and storm sewer system. Update facility schematics to accurately reflect all plumbing connections. Install a safeguard against vehicle washwaters entering the storm sewer unless permitted. Maintain and inspect the integrity of all underground storage tanks; replace when necessary. Train employees on proper disposal practices for all materials.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991, through December 31, 1992.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Refinishing Industry." EPA/625/7–91/016.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Repair Industry." EPA/625/7–91/013.
EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.
U.S. Postal Service. May 1992. "NPDES/Storm Water Guide." AS–554.

4. Pollutant Control Measures Required Through Other EPA Programs

EPA recognizes that other programs address the operation of vehicle and equipment maintenance and equipment cleaning operations. In particular, as described below, the Resource Conservation and Recovery Act (RCRA) and the Underground Storage Tank (UST) programs require careful management of materials used onsite which decreases the probability that storm water from such areas will be contaminated by these materials.

Under the RCRA program, on September 10, 1992, EPA promulgated standards in 40 CFR Part 279 for the management of used oils that are recycled (57 FR 41566). These standards include requirements for used oil generators, transporters, processors/re-refiners, and burners. The standards for used oil generators apply to all generators, regardless of the amount of used oil they generate. Do-it-yourself (DIY) generators which generate used oil from the maintenance of their personal vehicles, however, are not subject to the management standards (Section 279.20(a)(1)).

The requirements for used oil generators were designed to impose a minimal burden on generators while protecting human health and the environment from the risks associated with managing used oil. Under Subpart C of 40 CFR Part 279, used oil generators must not store used oil in units other than tanks, containers, or units subject to regulation under Part 264 or 265 of 40 CFR (Section 279.22(a)). In other words, generators may store used oil in tanks or containers that are not subject to Subpart J (Hazardous Waste Tanks) or Subpart I (Containers) of Parts 264/265, as long as such tanks or containers are maintained in compliance with the used oil management standards. This does not preclude generators from storing used oil in Subpart J tanks or Subpart I containers or other units, such as surface impoundments (Subpart K), that are subject to regulation under Part 264 or 265.

Storage units at generator facilities must be maintained in good condition and labeled with the words "used oil." Upon detection of a release of used oil to the environment, a generator must take steps to stop the release, contain the released used oil, and properly manage the released used oil and other materials (Sections 279.22(b) to (d)). Generators storing used oil in underground storage tanks are subject to the UST regulations in 40 CFR Part 280.

If used oil generators ship used oil offsite for recycling, they must use a transporter who has notified EPA and obtained an EPA identification number (Section 279.24).

The technical standards for USTs at 40 CFR Part 280 require that new UST systems (defined as systems for which installation commenced after December 12, 1988) use overfill prevention equipment that will: (1) Automatically shut off flow into the tank when the tank is no more than 95 percent full; or (2) alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high level alarm. The preceding requirements do not apply to systems that are filled by transfers of no more than 25 gallons at one time. Existing UST systems (defined as systems for which installation has commenced on or before December 12, 1988) are required to have installed the described overfill prevention equipment by December 12, 1998.

5. Special Conditions

The permit conditions that apply to ground transportation facilities build upon the requirements set forth in the baseline general permit for storm water discharges from industrial activities finalized on September 9, 1992 (57 FR 41236). The discussion that follows, therefore, only addresses conditions that differ from those required in the baseline permit.

Due to concern that many non-storm water discharges may be present at vehicle and equipment cleaning and maintenance facilities, EPA is requiring that all facilities provide proof that these discharges are not commingled and are appropriately controlled so as to protect all receiving waters.

Today's proposed permit clarifies in Part III.A. (Prohibition of Non-storm Water Discharges) that non-storm water discharges, including vehicle and equipment-washwaters, are not authorized by this permit. The operators of such non-storm water discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system or comply with applicable industrial pretreatment requirements if discharged to a municipal sanitary sewer system. In a related requirement under the storm water pollution prevention plan requirements, the permittee is required to attach a copy of the NPDES permit issued for vehicle washwaters or, if an NPDES permit has not yet been issued, a copy of pending application to the plan. For facilities that discharge vehicle and equipment washwaters to the sanitary sewer system, the operator of the sanitary system and associated treatment plant must be notified. A copy of the notification letter must be

attached to the plan. If an industrial user permit is issued under a pretreatment program, a copy of that permit must be attached in the plan as does any other permit to which the facility is subject. Some facilities may use other methods of disposal, such as collecting and hauling the wash water offsite. In these cases, the facility must document how the wash water is disposed and attach all pertinent documentation of that disposal practice to the plan.

6. Storm Water Pollution Prevention Plan Requirements

a. Description of potential pollutant sources. Under the description of potential pollutant sources in the storm water pollution prevention plan requirements, permittees are required to include storage areas for vehicles and equipment awaiting maintenance on their facility site map. EPA believes that this is appropriate since this area may potentially be a significant source of pollutants to storm water.

b. Measures and controls. Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

(1) Vehicle and equipment storage areas. The storage of vehicles and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility shall consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, installation of berming and diking of this area, use of absorbents, roofing or covering storage areas, cleaning pavement surface to remove oil and grease, or other equivalent methods.

(2) Fueling areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The facility shall consider covering the fueling area, using spill and overflow protection and cleanup equipment, minimizing runon of storm water to the fueling area, using dry cleanup methods, collecting the storm water runoff and providing treatment or recycling, or other equivalent measures.

(3) Material storage areas. Storage units of all materials (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids) must be maintained in good condition, so as to prevent contamination of storm water, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility shall consider indoor storage of the materials, installation of berming and diking of the area or other equivalent methods.

(4) Vehicle and equipment cleaning areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The facility shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all washwaters drain to the intended collection system (i.e., not the storm water drainage system unless NPDES permitted), collecting the storm water runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. The discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized by this section and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

(5) Vehicle and equipment maintenance areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The facility shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, or other equivalent measures.

(6) Locomotive sanding (loading sand for traction) areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from areas used for locomotive sanding (including locomotive sanding). The facility shall consider covering sanding areas, minimizing storm water runon/runoff, appropriate sediment removal practices to minimize the offsite transport of sanding material by storm water, or other equivalent measures.

As documented earlier, these six areas are the common sources of pollutants in storm water from vehicle and equipment cleaning and maintenance activities. Based upon the information provided in part 1 of the group application process, the suggested management measures are commonly used at ground transportation facilities. EPA believes that the incorporation of management practices such as those suggested, in conjunction with the baseline requirements, will substantially reduce the potential that these activities and areas will significantly contribute to the pollution of storm water discharges. In addition, EPA believes that these requirements continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities. Further, many facilities will find that management measures that they have already incorporated into the facility's operation, such as the installation of overfill protection equipment and labelling and maintenance of used oil storage units, that are already required under existing EPA programs will meet the requirements of this section.

Under the inspection requirements of the storm water pollution prevention plan elements, this section proposes that in addition to the comprehensive site evaluation required under Part XI of today's proposal, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility, at a minimum, on a monthly basis. The following areas shall be included in all inspections: storage areas for vehicles and equipment awaiting maintenance, fueling areas, vehicle and equipment maintenance areas (both indoors and outdoors), material storage areas, vehicle and equipment cleaning areas, and loading and unloading areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of all inspections shall be maintained.

The purpose of the inspections is to check on the implementation of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist is recommended. The checklist will ensure that all required areas are inspected, as well as help to meet the recordkeeping requirements.

Under the employee training component of the storm water pollution prevention plan requirements, the permittee is required to identify semiannual (twice per year) dates for such training. Employee training must,

at a minimum, address the following areas when applicable to a facility: Used oil management; spent solvent management; spill prevention and control; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management. Unlike some industrial operations, the industrial activities associated with vehicle and equipment maintenance that may affect storm water quality require the cooperation of all employees, not just one or two people. EPA, therefore, is proposing to require that employee training take place at least twice a year to serve as:

(1) Training for new employees;

(2) A refresher course for existing employees; and

(3) Training for all employees on any storm water pollution prevention techniques recently incorporated into the plan.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities in this section of today's proposed permit. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at ground transportation facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for facilities in this section of today's proposed permit. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.P.5. of today's permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in VI.E.7. (Sampling Waiver) and VI.E.6. (Representative Discharge). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE P–11—REQUIRED MONITORING PARAMETERS FOR STORM WATER DISCHARGES

Parameter	Unit	Frequency	Sample type[i]
Total Flow	Gallons.	1/year	Estimate.
Oil and Grease	mg/L ..	1/year	Grab.
Total Suspended Solids (TSS).	mg/L ..	1/year	Grab.
Chemical Oxygen Demand (COD).	mg/L ..	1/year	Grab.
Surfactants (MBAS)[ii].	mg/L ..	1/year	Grab.
pH	Standard.	1/year	Grab.

[i] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

[ii] Required only for storm water discharges from vehicle or equipment cleaning areas.

b. Quarterly visual examination of storm water quality—(1) Facilities shall

perform and document a visual examination of storm water quality of each storm water discharge associated with industrial activity from vehicle and equipment maintenance activities and equipment cleaning operations. If the storm water from such operations flows such that there are numerous small points of discharge, one examination may be conducted as representative of the adjacent flows. The examination must be made at least once in each designated period (described in Part (2) below) during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(2) Examinations shall be conducted at least once in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

(3) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information from the examination must be maintained onsite and must include: The examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. Based on information collected in the visual inspection the description of potential pollutant sources identified in the plan in accordance with Part XI.P.3.b.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.P.3.b.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such examination and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation. Records shall be kept for the entire permit term of such changes to the plan.

O. Storm Water Discharges Associated With Industrial Activity From Water Transportation Facilities That Have Vehicle Maintenance Shops and/or Equipment Cleaning Operations

1. Discharges Covered Under This Section

Special conditions have been developed for water transportation facilities that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication) and equipment cleaning operations. Vehicle and equipment maintenance is a broad term used to include the following activities: vessel and equipment fluid changes, mechanical repairs, parts cleaning, sanding, blasting, welding, refinishing, painting, fueling, and storage of the related materials and waste materials, such as oil, fuel, batteries, or oil filters. Equipment cleaning operations include areas where vessel and vehicle exterior washdown takes place. The conditions proposed in this section apply to storm water discharges from vehicle and equipment maintenance shops or cleaning operations located at water transportation facilities covered under the storm water application regulations (40 CFR 122.26) and applying for coverage under today's proposed permit.

The storm water application regulations define storm water discharges associated with industrial activity at 40 CFR 122.26(b)(14). Category (viii) of this definition includes transportation facilities classified as Standard Industrial Classification (SIC) codes 40, 41, 42 (except 4221–25), 43, 44, 45, and 5171 that have vehicle and equipment maintenance shops, equipment cleaning operations, or airport deicing operations. The category further states that only those portions of the facility that are either involved in vehicle and equipment maintenance (including vehicle and equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations are associated with industrial activity. The conditions proposed in this section only apply to the water transportation facilities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

The facilities that would potentially be covered by this section of today's proposed permit may be assigned SIC code 44.

SIC code 44 includes facilities primarily engaged in furnishing water transportation services. The following types of facilities are examples of those covered under SIC code 44:

- Deep Sea Foreign Transportation of Freight (SIC 4412)
- Deep Sea Domestic Transportation of Freight (SIC 4424)
- Freight Transportation on the Great Lakes—St. Lawrence Seaway (SIC 4432)
- Water Transportation of Freight, Not Elsewhere Classified (SIC 4449). Including:

—Canal barge operations
—Canal freight transportation
—Intracoastal freight transportation
—Lake freight transportation, except on the Great Lakes
—Log rafting and towing
—River freight transportation, except on the St. Lawrence Seaway
—Transportation of freight on bays and sounds of the oceans

- Deep Sea Transportation of Passengers, Except by Ferry (SIC 4481)
- Ferries (SIC 4482). Including:

—Car lighters (ferries)
—Railroad ferries

- Water Transportation of Passengers, Not Elsewhere Classified (SIC 4489). Including:

—Airboats (swamp buggy rides)
—Excursion boat operations
—Passenger water transportation on rivers and canals
—Sightseeing boats
—Water Taxis

- Marine Cargo Handling (SIC 4491). Including:

—Docks, including buildings and facilities

—Loading vessels
—Marine cargo handling
—Piers, including buildings and facilities
—Ship hold cleaning
—Stevedoring
—Unloading vessels
—Waterfront terminal operation

• Towing and Tugboat Services (SIC 4492). Including:
—Docking of ocean vessels
—Shifting of floating equipment within harbors
—Towing services, marine
—Tugboat service
—Undocking of ocean vessels

• Marinas (SIC 4493).[121] Including:
—Boat yards, storage and incidental repair
—Yacht basins

• Water Transportation Services, Not Elsewhere Classified (SIC 4499). Including:
—Boat cleaning
—Boat hiring, except pleasure
—Boat livery, except pleasure
—Boat rental, commercial
—Canal operation
—Cargo salvaging, from distressed vessels
—Chartering of commercial boats
—Dismantling ships
—Lighterage
—Marine railways for drydocks
—Marine salvaging
—Marine surveyors, except cargo
—Marine wrecking, ships for scrap
—Piloting vessels in and out of harbors
—Ship cleaning, except hold cleaning
—Ship registers: survey and classification of ships and marine equipment -
—Steamship leasing.

2. Pollutants Found in Storm Water Discharges

Table Q–1 lists potential pollutant source activities that commonly take place at water transportation vehicle maintenance and equipment cleaning operations.

TABLE Q–1.—INDUSTRIAL ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS

Activity	Pollutant source	Pollutant
Pressure Washing	Wash water	Paint solids, heavy metals, suspended solids.
Surface Preparation Paint Removal Sanding.	Sanding; mechanical grinding; abrasive blasting; paint stripping.	Spent abrasives, paint solids, heavy metals, solvents, dust.
Painting	Paint and paint thinner spills; spray painting; paint stripping; sanding; paint cleanup.	Paint solids, spent solvents, heavy metals, dust.
Engine Maintenance and Repairs.	Parts cleaning; waste disposal of greasy rags, used fluids, and batteries; use of cleaners & degreasers; fluid spills; fluid replacement.	Spent solvents, oil, heavy metals, ethylene glycol, acid/alkaline wastes, detergents.
Material Handling: Transfer Storage Disposal.	Fueling: spills; leaks; and hosing area	Fuel, oil, heavy metals.
	Liquid Storage in Above Ground Storage: spills and overfills; external corrosion; failure of piping systems.	Fuel, oil, heavy metals, material being stored.
	Waste Material Storage and Disposal: paint solids; solvents; trash; spent abrasives, petroleum products.	Paint solids, heavy metals, spent solvents, oil.
Shipboard Processes improperly discharged to storm sewer or into receiving water.	Process & cooling water; sanitary waste; bilge & ballast water.	Biochemical oxygen demand (BOD), bacteria, suspended solids, oil, fuel.

Sources: EPA, Office of Water and Hazardous Materials. December 1979. "Draft Development Document for Proposed Effluent Limitations Guidelines and Standards for the Shipbuilding and Repair Industry." EPA/440/1–79/076–b.
University of South Alabama, College of Engineering. September 1992. "Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities." College of Engineering Report No. 92–2.
NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991, through December 31, 1992.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Refinishing Industry." EPA/625/7–91/016.
EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention—The Automotive Repair Industry." EPA/625/7–91/013.
EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.
U.S. Postal Service. May 1992. "NPDES/Storm Water Guide." AS–554.

Table Q–2 presents summary statistics on facilities primarily engaged in water transportation activities having vehicle maintenance and/or equipment cleaning operations.

[121] "Guidelines for the Determination of Regulatory Status of Marinas and Related Operations." Facilities that are "primarily engaged" in operating marinas are best classified as SIC 4493—marinas. These facilities rent boat skips, store boats and generally perform a range of other marine services including boat cleaning and incidental boat repair. They frequently sell food, fuel, fishing supplies and may sell boats. For facilities classified as 4493 that are involved in vehicle (vessel) maintenance activities (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or equipment cleaning operations, those portions of the facility that are involved in such vehicle maintenance activities are considered to be associated with industrial activity and are covered under the storm water regulations.

Facilities classified as 4493 that are not involved in equipment cleaning or vessel maintenance activities (including vehicle rehabilitation, mechanical repairs, painting, and lubrication) are not intended to be covered under 40 CFR Section 122.26(b)(14)(viii) of the storm water permit application regulations. The retail sale of fuel alone at marinas, without any other vessel maintenance or equipment cleaning operations, is not considered to be grounds for coverage under the storm water regulations.

Table Q–2.—Statistics for Conventional Pollutants and Storm Water[1]

[In mg/L unless otherwise indicated]

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		99th percentile	
Sample type	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	15	14	8.6	6.0	0.0	0.0	39.0	11.0	7.0	6.0	39.0	11.0
COD	15	14	130.9	75.8	0.0	10.0	500.0	203.0	93.0	50.5	500.0	203.0
Nitrate + Nitrite Nitrogen	15	14	4.23	0.66	0.00	0.00	54.00	1.61	0.60	0.65	54.00	1.61
Total Kjeldahl Nitrogen	15	14	2.64	9.41	0.00	0.00	16.00	118.00	1.60	0.75	16.00	118.00
Oil & Grease	15	N/A	11.9	N/A	0.0	N/A	96.0	N/A	2.0	N/A	96.0	N/A
pH (s.u)	15	N/A	N/A	N/A	4.1	N/A	8.8	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	15	14	0.27	0.15	0.00	0.00	1.20	0.32	0.10	0.17	1.20	0.32
Total Suspended Solids	15	14	634	224	3	5	4330	944	135	55	4330	944
Aluminum	4	3	3.1	2.2	0.2	0.2	6.3	5.4	3.0	1.0	6.3	5.4
Iron	4	3	26.7	5.0	0.2	0.4	94.0	8.9	6.3	5.7	94.0	8.9
Lead	4	3	0.2	0.1	0.0	0.0	0.7	0.1	0.1	0.1	0.7	0.1
Zinc	4	3	0.7	0.4	0.1	0.2	2.2	0.9	0.2	0.2	2.2	0.9

[1] Mean, Maximum, Minimum, Median, and Percentiles include all detects and nondetects.
[2] Composite samples.
Note: There is no information for 95th percentile columns.

EPA compared the data with the EPA, Office of Water Regulations and Standards, Criteria and Standards Division, "Quality Criteria for Water 1986," otherwise known as the "Gold Book Standards." As shown in Table Q–3, EPA found the following parameters to be of concern for Water Transportation Facilities which have repair and maintenance activities and/or equipment cleaning activities: oil & grease, chemical oxygen demand (COD), total suspended solids (TSS), pH, aluminum, iron, and zinc. In addition, part 2 data contained aluminum, iron, and zinc concentrations which exceed toxic levels. The acute fresh water criteria and part 2 mean data are presented below in Table Q–3.

TABLE Q–3

Pollutant	Acute fresh water criteria (mg/L)	Part 2 data mean (mg/L)
Aluminum	0.750	3.12
Iron	1.0	26.58
Zinc	0.12	0.6775

3. Options for Controlling Pollutants

The measures commonly implemented to reduce pollutants in storm water associated with water transportation vehicle maintenance and/or equipment cleaning operations are generally simple to implement and are uncomplicated practices. Table Q–4 identifies Best Management Practices (BMPs) associated with different activities that routinely take place at water transportation facilities with vehicle maintenance and equipment cleaning operations.

TABLE Q–4.—INDUSTRIAL ACTIVITIES AND POTENTIAL BEST MANAGEMENT PRACTICES

Activity	BMPs
Pressure washing	Collect discharge water and remove all visible solids before discharging to a sewer system, or where permitted, to a drainage system, or receiving water.
	Perform pressure washing only in designated areas where wash water containment can be effectively achieved.
	Use no detergents or additives in the pressure wash water.
	Direct deck drainage to a collection system sump for settling and/or additional treatment.
	Implement diagonal trenches or berms and sumps to contain and collect wash water at marine railways.
	Use solid decking, gutters, and sumps at lift platforms to contain and collect wash water for possible reuse.
Surface preparation, sanding, and paint removal.	Enclose, cover, or contain blasting and sanding activities to the extent practical to prevent abrasives, dust, and paint chips from reaching storm sewers or receiving water.
	Where feasible, cover drains, trenches, and drainage channels to prevent entry of blasting debris to the system.
	Prohibit uncontained blasting or sanding activities performed over open water.
	Prohibit blasting or sanding activities performed during windy conditions which render containment ineffective.
	Inspect and clean sediment traps to ensure the interception and retention of solids prior to entering the drainage system.
	Sweep accessible areas of the drydock to remove debris and spent sandblasting material prior to flooding.
	Collect spent abrasives routinely and store under a cover to await proper disposal
Painting	Enclose, cover, or contain painting activities to the maximum extent practical to prevent overspray from reaching the receiving water.
	Prohibit uncontained spray painting activities over open water.
	Prohibit spray painting activities during windy conditions which render containment ineffective.
	Mix paints and solvents in designated areas away from drains, ditches, piers, and surface waters, preferably indoors or under cover.

TABLE Q–4.—INDUSTRIAL ACTIVITIES AND POTENTIAL BEST MANAGEMENT PRACTICES—Continued

Activity	BMPs
	Have absorbent and other cleanup items readily available for immediate cleanup of spills.
	Allow empty paint cans to dry before disposal.
	Keep paint and paint thinner away from traffic areas to avoid spills.
	Recycle paint, paint thinner, and solvents.
	Train employees on proper painting and spraying techniques, and use effective spray equipment that delivers more paint to the target and less overspray.
Drydock maintenance	Clean and maintain drydock on a regular basis to minimize the potential for pollutants in the storm water runoff.
	Sweep accessible areas of the drydock to remove debris and spent sandblasting material prior to flooding.
	If hosing must be used as a removal method, collect wash water to remove solids and potential metals.
	Clean the remaining areas of the dock after a vessel has been removed and the dock raised.
	Remove and properly dispose of floatable and other low-density waste (wood, plastic, insulations, etc.).
Drydocking	Use plastic barriers beneath the hull, between the hull and drydock walls for containment.
	Use plastic barriers hung from the flying bridge of the drydock, from the bow or stern of the vessel, or from temporary structures for containment.
	Weight the bottom edge of the containment tarpaulins or plastic sheeting during a light breeze.
	Use plywood and/or plastic sheeting to cover open areas between decks when sandblasting (scuppers, railings, freeing ports, ladders, and doorways).
	Install tie rings or cleats, cable suspension systems, or scaffolding to make implementation containment easier.
Nondrydock containment	Hang tarpaulin from the boat, fixed, or floating platforms to reduce pollutants transported by wind.
	Pave or tarp surfaces under marine railways.
	Clean railways before the incoming tide.
	Haul vessels beyond the high tide zone before work commences or halt work during high tide.
	Place plastic sheeting or tarpaulin underneath boats to contain and collect waste and spent materials and clean and sweep regularly to remove debris.
	Use fixed or floating platforms with appropriate plastic or tarpaulin barriers as work surfaces and for containment when work is performed on a vessel in the water to prevent blast material or paint overspray from contacting storm water or the receiving water.
	Sweep, rather than hose, debris present on the dock.
Engine maintenance and repairs	Maintain an organized inventory of materials used in the maintenance shop.
	Dispose of greasy rag, oil filters, air filters, batteries, spent coolant, and degreasers properly.
	Label and track the recycling of waste material (i.e., used oil, spent solvents, batteries).
	Drain oil filters before disposal or recycling.
	Store cracked batteries in a nonleaking secondary container.
	Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
	Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
	Plug floor drains that are connected to the storm or sanitary sewer; if necessary, install a sump that is pumped regularly.
	Inspect the maintenance area regularly for proper implementation of control measures.
	Train employees on proper waste control and disposal procedures.
Material Handling: Bulk liquid storage and containment.	Store permanent tanks in a paved area surrounded by a dike system which provides sufficient containment for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.
	Maintain good integrity of all storage tanks.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Material Handling: Containerized material storage.	Store containerized materials (fuels, paints, solvents, etc.) in a protected, secure location and away from drains.
	Store reactive, ignitable, or flammable liquids in compliance with the local fire code.
	Identify potentially hazardous materials, their characteristics, and use.
	Control excessive purchasing, storage, and handling of potentially hazardous materials.
	Keep records to identify quantity, receipt date, service life, users, and disposal routes.
	Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials.
	Educate personnel for proper storage, use, cleanup, and disposal of materials.
	Provide sufficient containment for outdoor storage areas for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.
	Use temporary containment where required by portable drip pans.
	Use spill troughs for drums with taps
Material Handling: Designated material mixing areas.	Mix paints and solvents in designated areas away from drains, ditches, piers, and surface waters. Locate designated areas preferably indoors or under a shed.

TABLE Q–4.—INDUSTRIAL ACTIVITIES AND POTENTIAL BEST MANAGEMENT PRACTICES—Continued

Activity	BMPs
	If spills occur, • Stop the source of the spill immediately. • Contain the liquid until cleanup is complete. • Deploy oil containment booms if the spill may reach the water. • Cover the spill with absorbent material. • Keep the area well ventilated. • Dispose of cleanup materials properly. • Do not use emulsifier or dispersant.
Shipboard process water handling	Keep process and cooling water used aboard ships separate from sanitary wastes to minimize disposal costs for the sanitary wastes. Keep process and cooling water from contact with spent abrasives and paint to avoid discharging these pollutants. Inspect connecting hoses for leaks.
Shipboard sanitary waste disposal	Discharge sanitary wastes from the ship being repaired to the yard's sanitary system or dispose of by a commercial waste disposal company. Use appropriate material transfer procedures, including spill prevention and containment activities.
Bilge and Ballast water	Collect and dispose of bilge and ballast waters which contain oils, solvents, detergents, or other additives to a licensed waste disposal company.

Sources: University of South Alabama, College of Engineering. September 1992. "Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities." College of Engineering Report No. 92–2.
NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.
EPA, Office of Water. January 1993. "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters." 840–B–92–002.

4. Pollutant Control Measures Required Through Other EPA Programs

EPA recognizes that the Resource Conservation and Recovery Act (RCRA) and the Underground Storage Tank (UST) programs require careful management of materials used at Water Transportation Facilities and Boat Building & Repairing Facilities.

Under the RCRA program, on September 10, 1992, EPA promulgated standards in 40 CFR Part 279 for the management of used oils that are recycled (57 FR 41566). These standards include requirements for used oil generators, transporters, processors/re-refiners, and burners. The standards for used oil generators apply to all generators, regardless of the amount of used oil they generate. Do-it-yourself (DIY) generators which generate used oil from the maintenance of their personal vehicles, however, are not subject to the management standards (Section 279.20(a)(1)).

The requirements for used oil generators were designed to impose a minimal burden on generators while protecting human health and the environment from the risks associated with managing used oil. Under Subpart C of 40 CFR Part 279, used oil generators must not store used oil in units other than tanks, container, or units subject to regulation under Part 264 or 265 of 40 CFR (Section 279.22(a)). In other words, generators may store used oil in tanks or containers that are not subject to Subpart J (Hazardous Waste Tanks) or Subpart I (Containers) of Parts 264/265, as long as such tanks or containers are maintained in compliance with the used oil management standards. This does not preclude generators from storing used oil in Subpart J tanks or Subpart I containers or other units, such as surface impoundments (Subpart K), that are subject to regulation under Part 264 or 265.

Storage units at generator facilities must be maintained in good condition and labeled with the words "used oil." Upon detection of a release of used oil to the environment, a generator must take steps to stop the release, contain the released used oil, and properly manage the released used oil and other materials (Section 279.22(b) to (d)). Generators storing used oil in underground storage tanks are subject to the UST regulations (40 CFR Part 280).

If used oil generators ship used oil offsite for recycling, they must use a transporter who has notified EPA and obtained an EPA identification number (Section 279.24).

The technical standards for USTs at 40 CFR Part 280 require that new UST systems (defined as systems for which installation commenced after December 12, 1988) use overfill prevention equipment that will: (1) Automatically shut off flow into the tank when the tank is no more than 95 percent full; or (2) alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high level alarm. The preceding requirements do no apply to systems that are filled by transfers of no more than 25 gallons at one time. Existing UST systems (defined as systems for which installation has commenced on or before December 12, 1988) are required to have installed the described overfill prevention equipment by December 12, 1998.

5. Special Conditions

a. Prohibition of non-storm water discharges. Prohibited non-storm water discharges including bilge and ballast water, pressure wash water, sanitary wastes, and cooling water originating from vessels are not authorized by this section. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system.

This section does not authorize the non-storm water discharge of pressure wash water. Pressure washing is used to remove marine growth from vessels. EPA has found that unpermitted releases of pressure wash water is a habitual problem at water transportation facilities. Marine growths and paint debris found in the wash water can contain significant quantities of heavy metals, and this water cannot be discharged.

6. Storm Water Pollution Prevention Plan Requirements

The conditions that apply to water transportation facilities with vehicle maintenance and/or equipment cleaning operations build upon the requirements set forth in the baseline general permit for storm water discharges from

industrial activities which was finalized on September 9, 1992 (57 FR 41236).

Contents of the plan—(1) Description of potential pollutant sources—Under the description of potential pollutant sources in the storm water pollution prevention plan requirements, permittees are required to include the location(s) on their facility site map where engine maintenance and repair work, vessel maintenance and repair work, and pressure washing are performed. This requirement is the same as the baseline general permit of September 9, 1992, but here it is expressed in more appropriate terms for the water transportation industry. The baseline general permit includes "vehicle and equipment maintenance and/or cleaning areas." The location of "processing areas" at the facility included under the baseline general permit was replaced with the more specific language of painting, blasting, welding, and metal fabrication for this section. EPA believes that this specificity is appropriate for the water transportation industry and that these areas may potentially be a significant source of pollutants to storm water. Rather than requiring the location of "storage areas" as in the baseline general permit, this storm water pollution prevention plan specifies that the location of liquid storage areas (i.e., paint, solvents, resins) and material storage areas (i.e., blasting media, aluminum, steel) be shown. This again is the same requirement, but it is expressed in more specific terms for this industry.

(2) Measures and controls—Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

(a) Pressure washing area—When pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by an NPDES permit. The plan must describe the measures to collect or contain the discharge from the pressure washing area, detail the method for the removal of the visible solids, describe the method of disposal of the collected solids, and identify where the discharge will be released (i.e., the receiving waterbody, storm sewer system, sanitary sewer system).

(b) Blasting and painting areas—The facility must consider containing all blasting and painting activities to prevent abrasives, paint chips, and overspray from reaching the receiving water or the storm sewer system. The plan must describe measures taken at the facility to prevent or minimize the discharge of spent abrasive, paint chips, and paint into the receiving waterbody and storm sewer system. The facility may consider hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris. Where required, a schedule for cleaning storm systems to remove deposits of abrasive blasting debris and paint chips should be addressed within the plan. The plan should include any standard operating practices with regard to blasting and painting activities. Such included items may be the prohibition of performing uncontained blasting and painting over open water or blasting and painting during windy conditions which can render containment ineffective.

(c) Material storage areas—All stored and containerized materials (fuels, paints, solvents, waste oil, antifreeze, batteries) must be stored in a protected, secure location away from drains and plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility must specify which materials are stored indoors and consider containment or enclosure for materials that are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the containment measures in place to prevent leaks and spills. The facility must consider implementing an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous materials. Those facilities where abrasive blasting is performed must specifically include a discussion on the storage and disposal of spent abrasive materials generated at the facility.

(d) Engine maintenance and repair areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for engine maintenance and repair. The facility may consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(e) Material handling areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from material handling operations and areas (i.e., fueling, paint & solvent mixing, disposal of process wastewater streams from vessels). The facility may consider covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area, preferably indoors or under a shed; and minimizing runon of storm water to material handling areas. Where applicable, the plan must address the replacement or repair of leaking connections, valves, pipes, hoses, and soil chutes carrying wastewater from vessels.

(f) Drydock activities—The plan must address the routine maintenance and cleaning of the drydock to minimize the potential for pollutants in the storm water runoff. The plan must describe the procedures for cleaning the accessible areas of the drydock prior to flooding and final cleanup after the vessel is removed and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on the drydock must also be included within the plan. The facility should consider items such as sweeping rather than hosing off debris and spent blasting material from the accessible areas of the drydock prior to flooding and having absorbent materials and oil containment booms readily available to contain and cleanup any spills.

(g) General yard area—The plan must include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc., must be routinely removed from the general yard area. The facility may consider such measures as providing covered trash receptacles in each yard, on each pier, and on board each vessel being repaired.

These seven areas are the common sources of pollutants in storm water runoff from water transportation facilities which have vehicle maintenance and/or equipment cleaning activities. Based upon the September 1992 "Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities" prepared by the College of Engineering at the University of South Alabama, the suggested management measures are commonly used at water transportation facilities. EPA believes that the incorporation of management practices such as those suggested will substantially reduce the potential that these activities and areas will significantly contribute to the pollution of storm water discharges. In addition, EPA believes that these requirements continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges

associated with different facilities. Further, many facilities will find that management measures that they have already incorporated into the facility's operation, such as the installation of overfill protection equipment and labelling and maintenance of used oil storage units, that are already required under existing EPA programs will meet the requirements of this section.

Under the preventive maintenance requirements of the storm water pollution prevention plan elements, the plan specifically includes the routine inspection of sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system. Because of the nature of operations such as abrasive blasting which occur at water transportation facilities, specific routine attention needs to be placed on the collection and proper disposal of spent abrasive materials, paint chips, and other solids.

Under the inspection requirements of the storm water pollution prevention plan elements, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility, at a minimum, on a monthly basis. The following areas shall be included in all inspections: pressure washing area, blasting and painting areas, material storage areas, engine maintenance and repair areas, material handling areas, drydock area, and general yard area. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records shall be maintained.

The purpose of the inspections is to check on the implementation of the storm water pollution prevent plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist is highly encouraged. The checklist will ensure that all required areas are inspected, as well as help to meet the recordkeeping requirements.

Under the employee training component of the storm water pollution prevention plan requirements, the permittee is required to identify at least semiannual (twice per year) dates for such training. Employee training must, at a minimum address the following areas when applicable to a facility: used oil management; spent solvent management; proper disposal of spent abrasives; proper disposal of vessel wastewaters, spill prevention and control; fueling procedures; general good housekeeping practices; proper painting and blasting procedures; and used battery management. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. The facility must consider posting easy to read descriptions or graphic depictions of BMPs and emergency phone numbers in the work areas. Unlike some industrial operations, the industrial activities associated with water transportation facilities that may affect storm water quality require the cooperation of all employees. EPA, therefore, is proposing to require that employee training take place at least twice a year to serve as: (1) training for new employees; (2) a refresher course for existing employees; (3) training for all employees on any storm water pollution prevention techniques recently incorporated into the plan; and (4) a forum for the facility to invite independent contractors and customers to inform them on pollution prevention procedures and requirements.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that water transportation facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan, the proposed permit requires water transportation facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table Q–5. The pollutants listed in Table Q–5 were found to be above benchmark levels for a significant portion of water transportation facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. EPA is requiring monitoring after the pollution prevention plan has been implemented to ensure a reduction of pollutants is realized.

At a minimum, storm water discharges from water transportation facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table Q–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE Q–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Total Recoverable Aluminum	0.75
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
Total Recoverable Zinc	0.065
Chemical Oxygen Demand	55
Total Suspended Solids	100

If the average concentration for a parameter is less than or equal to the value listed in Table Q–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table Q–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE Q–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table Q–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table Q–5, then no further sampling is required for that parameter.

TABLE Q–6.—SCHEDULE OF MONITORING—Continued

4th Year of Permit Coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table Q–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.E. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample Type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly Visual Examination of Storm Water Quality. Monthly visual inspections of storm water discharges from each outfall are required at water transportation facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the

effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.Q.7. of today's proposed permit.

a. Storm water discharges. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees must monitor all storm water discharges associated with vehicle, equipment, or vessel maintenance or cleaning for those parameters identified in Table Q–7 at least annually (1 time per year) except as provided in VI.A. (Sampling Waiver and Representative Discharge). In addition to the parameters listed, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE Q–7.—STORM WATER DISCHARGE PARAMETERS

Parameter	Unit	Frequency	Sample Type[1]
Total Flow	MGD	1/year	Estimate.
Oil & Grease	mg/L	1/year	Grab.
Chemical Oxygen Demand (COD)	mg/L	1/year	Grab.
Total Suspended Solids (TSS)	mg/L	1/year	Grab.
pH	standard	1/year	Grab.
Total Recoverable Aluminum	mg/L	1/year	Grab.
Total Recoverable Iron	mg/L	1/year	Grab.
Total Recoverable Zinc	mg/L	1/year	Grab.
Acute whole effluent toxicity[2]		1/year	Grab.

[1] The grab. sample shall be collected in the first 30 minutes of the discharge of as soon thereafter as practical, but not to exceed 60 minutes.
[2] The acute whole effluent toxicity shall be performed in accordance with Part XI.Q.7.c. of this section.

b. Toxicity Testing—(1.) Test Procedures (*a*) The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater bodies. Due to the nonsaline nature of rainwater, freshwater should also be used for discharges to estuarine, marine, or other naturally saline waterbodies.

(*b*) All test organisms, procedures and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA/600/4–90/027, or the most current edition. The control water used will be moderately hard water as described in EPA/600/4–90/027, Table 6, or the most current edition.

(*c*) Tests shall be conducted annually (once per year) on a grab sample of the discharge. Test shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–27 (or the most current edition), Section 12, Report Preparation, and the report submitted to EPA with the Discharge Monitoring Reports (DMRs). On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(*2*) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected in the storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the sources of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

9. Cost Estimates

This section does not include numeric effluent limits. The BMPs described within this section are designed to prevent or minimize pollutants in the storm water runoff. Facilities choose and implement the BMPs which best fit site specific requirements. Because this section does not contain numeric effluent limits or requirements to implement specific, predetermined BMPs, an economic achievable analysis is not required.

References used:

EPA, Office of Water and Hazardous Materials. December 1979. "Draft Development Document for Proposed Effluent Limitations Guidelines and Standards for the Shipbuilding and Repair Industry." EPA/440/1–79/076-b.

University of South Alabama, College of Engineering. September 1992. "Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities." College of Engineering Report No. 92–2.

EPA Multi-sector Section P, Storm Water Discharges from Vehicle and Equipment Maintenance and Cleaning Operations.

NPDES Storm Water Group Applications—Part 1 and Part 2. Received by EPA March 18, 1991 through December 31, 1992.

Executive Office of the President, Office of Management and Budget, 1987. "Standard Industrial Classification Manual 1987." National Technical Information Service Order no. PB 87–100012.

R. Storm Water Discharges Associated With Industrial Activity From Ship and Boat Building or Repairing Yards

1. Discharges Covered Under This Section

The storm water application regulations define storm water discharges associated with industrial activity at 40 CFR 122.26(b)(14). Category (ii) of this definition includes facilities commonly identified by Standard Industrial Classification (SIC) codes 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, and 373. The conditions proposed in this section apply to those facilities that may be assigned SIC code 373.

SIC code 373 includes facilities primarily engaged in ship and boat building and repairing services. The following facilities are covered under SIC code 373:

- *Ship Building and Repairing (SIC code 3731)*—These are establishments primarily engaged in building and repairing ships, barges, and lighters, whether self-propelled or towed by other crafts. The industry also includes the conversion and alteration of ships and the manufacture of off-shore oil and gas well drilling and production platforms (whether or not self-propelled). Examples include building and repairing of barges, cargo vessels, combat ships, crew boats, dredges, ferryboats, fishing vessels, lighthouse tenders, naval ships, offshore supply boats, passenger-cargo vessels, patrol boats, sailing vessels, towboats, trawlers, and tugboats.
- *Boat Building and Repairing (SIC code 3732)*—These facilities are primarily engaged in building and repairing boats. Examples include building and repairing of fiberglass boats, motor-boats, sailboats, rowboats, canoes, dinghies, dories, small fishing boats, houseboats, kayaks, lifeboats, pontoons, and skiffs.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Pollutants Found in Storm Water Discharges

Special conditions have been developed for boat and ship building and repairing operations. Common activities at ship and boat yards include: vessel and equipment cleaning fluid changes, mechanical repairs, parts cleaning, sanding, blasting, welding, refinishing, painting, fueling, and storage of the related materials and waste materials, such as oil, fuel, batteries, or oil filters. All of these areas are potential sources of pollutants to storm water discharges. Table R–1 lists pollutants associated with activities that commonly take place at Ship Building and Repairing Facilities (SIC 3731) and Boat Building and Repairing Facilities (SIC 3732).

TABLE R–1.—COMMON POLLUTANT SOURCES AT SHIP AND BOAT BUILDING AND REPAIRING FACILITIES

Activity	Pollutant source	Pollutant
Pressure Washing	Wash water	Paint solids, heavy metals, suspended solids.
Surface Preparation, Paint Removal, Sanding.	Sanding; mechanical grinding; abrasive blasting; paint stripping	Spent abrasives, paint solids, heavy metals, solvents, dust.
Painting	Paint and paint thinner spills; spray painting; paint stripping; sanding; paint cleanup.	Paint solids, spent solvents, heavy metals, dust.
Engine Maintenance and Repairs	Parts cleaning; waste disposal of greasy rags, used fluids, and batteries; use of cleaners and degreasers; fluid spills; fluid replacement.	Spent solvents, oil, heavy metals, ethylene glycol, acid/alkaline wastes, detergents.
Material Handling: Transfer Storage Disposal.	Fueling: spills; leaks; and hosing area	Fuel, oil, heavy metals.
	Liquid Storage in Above Ground Storage: spills and overfills; external corrosion; failure of piping systems.	Fuel, oil, heavy metals, material being stored.
	Waste Material Storage and Disposal: paint solids; solvents; trash; spent abrasives, petroleum products.	Paint solids, heavy metals, spent solvents, oil.
Shipboard Processes Improperly discharged to storm sewer or into receiving water.	Process and cooling water; sanitary waste; bilge and ballast water	Biochemical oxygen demand (BOD), bacteria, suspended solids, oil, fuel.

Sources: Executive Office of the President, Office of Management and Budget, 1987. Standard Industrial Classification Manual 1987. National Technical Information Service Order no. PB 87–100012.

NPDES Storm Water Group Applications—Part 1 and Part 2. Received by EPA March 18, 1991 through December 31, 1992.

EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention the Automotive Refinishing Industry." EPA/625/7–91/016.

EPA, Office of Research and Development. October 1991. "Guides to Pollution Prevention the Automotive Repair Industry." EPA/625/7–91/016.

EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.

EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

EPA, Office of Water and Hazardous Materials. December 1979. "Draft Development Document for Proposed Effluent Limitations Guidelines and Standards for the Shipbuilding and Repair Industry." EPA/440/1–79/076-b.

University of South Alabama, College of Engineering. September 1992. "Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities." College of Engineering Report No. 92–2.

Part 2 data revealed that boat repair facilities that have repair and maintenance activities exposed to storm water (including engine repair and maintenance, vessel repair and maintenance, painting, blasting, sanding and welding) and boat building facilities which have building activities exposed to storm water (including cutting, routing, forming, assembling, painting, varnishing, sanding and welding) have mean and median pollutant concentrations at the levels of ship building and repair facilities.

Those boat building and repair facilities that have manufacturing and repair operations enclosed indoors show significantly lower levels in each reported parameter and are not required to monitor their storm water discharges under this section. Part 2 storm water data showed that these enclosed facilities did not report data on metals. As required by 40 CFR 122.21(g)(ii) and (iii), group applicants were only required to sample for metals if the facility knew or had reason to believe it would be expected in the discharge.

Table R–2 presents summary statistics on facilities primarily engaged in boat and ship building and repair activities.

TABLE R-2.—STATISTICS FOR STORM WATER POLLUTANTS[i]

[In mg/L unless otherwise indicated]

Pollutant	No. of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample Type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	44	37	5.0	7.4	0.0	0.0	23.0	138.0	2.8	0.9	15.0	23.0	23.0	138.0
COD	51	43	73.2	60.8	0.0	0.0	450.0	810.0	53.0	28.0	260.0	240.0	450.0	810.0
Nitrate + Nitrite Nitrogen	51	43	0.79	0.85	0.0	0.0	6.0	5.0	0.72	0.72	1.60	1.80	6.00	5.00
Total Kjeldahl Nitrogen	51	43	1.19	2.36	0.0	0.0	3.4	48.0	1.00	0.97	2.40	3.00	3.40	48.00
Oil & Grease	52	N/A	1.0	N/A	0.0	N/A	14.0	N/A	0.0	N/A	5.0	N/A	14.0	N/A
pH (s.u)	43	N/A	N/A	N/A	0.7	N/A	8.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	51	45	0.21	0.68	0.0	0.0	2.2	32.0	0.00	0.00	0.91	0.76	2.20	32.0
Total suspended solids	51	45	92	39	0.0	0.0	1200	300	17	8.0	505	200	1200	300
Arsenic	3	2	0.05	0.02	0.0	0.0	0.14	0.03	0.0	0.02	0.135	0.03	0.14	0.03
Copper	5	5	0.16	0.08	0.01	0.01	0.32	0.13	0.15	0.09	0.320	0.13	0.32	0.13
Iron	4	2	3.69	3.43	0.18	0.64	13.0	6.22	0.80	3.43	13.0	6.22	13.0	6.22
Lead	6	4	0.75	0.11	0.0	0.0	4.24	0.33	0.04	0.06	4.24	0.33	4.24	0.33
Zinc	2	1	0.31	0.33	0.25	0.33	0.36	0.33	0.31	0.33	0.36	0.33	0.36	0.33

[i] Mean, Maximum, Minimum, Median, and Percentiles include all detects and non detects.
[ii] Composite samples.

EPA compared the data with the EPA, Office of Water Regulations and Standards, Criteria and Standards Division, "Quality Criteria for Water 1986," otherwise known as the "Gold Book Standards." The monitoring requirements under this permit build upon those requirements set forth in the baseline general permit for storm water discharges from industrial activities finalized on September 9, 1992 (57 FR 41236). EPA found the following parameters to be of concern for ship building and repair activities; boat repair activities that have repair and maintenance activities exposed to storm water (including engine repair and maintenance, vessel repair and maintenance, painting, blasting, sanding and welding); and boat building activities that have building activities exposed to storm water (including cutting, routing, forming, assembling, painting, varnishing, sanding and welding): copper, lead, and zinc. In addition, part 2 data revealed copper, lead, and zinc concentrations which exceed toxic levels as presented in Table R–3. Table R–3.

COMPARISON OF PART 2 DATA WITH ACUTE FRESH WATER CRITERIA

Pollutant	Acute fresh water criteria	Part 2 data mean
Copper	0.018 mg/L	0.046 mg/L
Lead	0.082 mg/L	1.49 mg/L
Zinc	0.120 mg/L	0.65 mg/L

3. Options for Controlling Pollutants

The measures commonly implemented to reduce pollutants in storm water discharges from boat and ship building and repairing facilities are generally uncomplicated and simple to implement. Table R–4 identifies Best Management Practices (BMPs) associated with various activities that routinely occur at boat and ship building and repair facilities.

TABLE R–4.—COMMON MANAGEMENT PRACTICES FOR STORM WATER POLLUTION PREVENTION AT SHIP AND BOAT BUILDING AND REPAIRING FACILITIES

Activity	BMPs
Pressure washing	Collect discharge water and remove all visible solids before discharging to a sewer system, or where permitted by an individual NPDES permit, to a drainage system, or receiving water.
	Perform pressure washing only in designated areas where wash water containment can be effectively achieved.
	Use no detergents or additives in the pressure wash water.
	Direct deck drainage to a collection system sump for settling and/or additional treatment.
	Implement diagonal trenches or berms and sumps to contain and collect wash water at marine railways.
	Use solid decking, gutters, and sumps at lift platforms to contain and collect wash water for possible reuse.
Surface preparation, sanding, and paint removal.	Enclose, cover, or contain blasting and sanding activities to the maximum extent practical to prevent abrasives, dust, and paint chips from reaching storm sewers or receiving water.
	Where feasible, cover drains, trenches, and drainage channels to prevent entry of blasting debris to the system.
	Prohibit uncontained blasting or sanding activities over open water.
	Prohibit blasting or sanding activities during windy conditions which render containment ineffective.
	Inspect and clean sediment traps to ensure the interception and retention of solids prior to entering the drainage system.
	Sweep accessible areas of the drydock to remove debris and spent sandblasting material prior to flooding.
	Collect spent abrasives routinely and store under a cover to await proper disposal
Painting	Enclose, cover, or contain painting activities to the maximum extent practical to prevent overspray from reaching the receiving water.
	Prohibit uncontained spray painting activities over open water.
	Prohibit spray painting activities during windy conditions which render containment ineffective.
	Mix paints and solvents in designated areas away from drains, ditches, piers, and surface waters, preferably indoors or under a shed.
	Have absorbent and other cleanup items readily available for immediate cleanup of spills.
	Allow empty paint cans to dry before disposal.
	Keep paint and paint thinner away from traffic areas to avoid spills.
	Recycle paint, paint thinner, and solvents.
	Train employees on proper painting and spraying techniques, and use effective spray equipment that delivers more paint to the target and less overspray.
Drydock maintenance	Clean and maintain drydock on a regular basis to minimize the potential for pollutants in the storm water runoff.
	Sweep accessible areas of the drydock to remove debris and spent sandblasting material prior to flooding.
	If hosing must be used as a removal method, collect wash water to remove solids and potential metals.
	Clean the remaining areas of the dock after a vessel has been removed and the dock raised.
	Remove and properly dispose of floatable and other low-density waste (wood, plastic, insulations, etc.).
Drydock activities	Use plastic barriers beneath the hull, between the hull and drydock walls for containment.
	Use plastic barriers hung from the flying bridge of the drydock, from the bow or stern of the vessel, or from temporary structures for containment.
	Weight the bottom edge of the containment tarpaulins or plastic sheeting during a light breeze.
	Use plywood and/or plastic sheeting to cover open areas between decks when sandblasting (scuppers, railings, freeing ports, ladders, and doorways).
	Install tie rings or cleats, cable suspension systems, or scaffolding to make implementation containment easier.
Nondrydock activities	Hang tarpaulin from the boat, fixed, or floating platforms to reduce pollutants transported by wind.
	Pave or tarp surfaces under marine railways.

TABLE R–4.—COMMON MANAGEMENT PRACTICES FOR STORM WATER POLLUTION PREVENTION AT SHIP AND BOAT BUILDING AND REPAIRING FACILITIES—Continued

Activity	BMPs
	Clean railways before the incoming tide
	Haul vessels beyond the high tide zone before work commences or halt work during high tide.
	Place plastic sheeting or tarpaulin underneath boats to contain and collect waste and spent materials and clean and sweep regularly to remove debris.
	Use fixed or floating platforms with appropriate plastic or tarpaulin barriers as work surfaces and for containment when work is performed on a vessel in the water to prevent blast material or paint overspray from contacting storm water or the receiving water.
	Sweep rather than hose debris present on the dock.
Engine maintenance and repairs.	Maintain an organized inventory of materials used in the maintenance shop.
	Dispose of greasy rag, oil filters, air filters, batteries, spent coolant, and degreasers properly.
	Label and track the recycling of waste material (i.e., used oil, spent solvents, batteries).
	Drain oil filters before disposal or recycling.
	Store cracked batteries in a nonleaking secondary container.
	Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
	Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
	Plug floor drains that are connected to the storm or sanitary sewer; if necessary, install a sump that is pumped regularly.
	Inspect the maintenance area regularly for proper implementation of control measures.
	Train employees on proper waste control and disposal procedures.
Material Handling	Store permanent tanks in a paved area surrounded by a dike system which provides sufficient containment for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.
Bulk liquid storage and containment.	Maintain good integrity of all storage tanks.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Material Handling	Store containerized materials (fuels, paints, solvents, etc.) in a protected, secure location and away from drains.
Containerized material storage.	Store reactive, ignitable, or flammable liquids in compliance with the local fire code.
	Identify potentially hazardous materials, their characteristics, and use.
	Control excessive purchasing, storage, and handling of potentially hazardous materials.
	Keep records to identify quantity, receipt date, service life, users, and disposal routes.
	Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials.
	Educate personnel for proper storage, use, cleanup, and disposal of materials.
	Provide sufficient containment for outdoor storage areas for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.
	Use temporary containment where required by portable drip pans.
	Use spill troughs for drums with taps.
Material Handling	Mix paints and solvents in designated areas away from drains, ditches, piers, and surface waters. Locate designated areas preferably indoors or under a shed.
Designated material mixing areas.	
	If spills occur, • Stop the source of the spill immediately. • Contain the liquid until cleanup is complete. • Deploy oil containment booms if the spill may reach the water. • Cover the spill with absorbent material. • Keep the area well ventilated. • Dispose of cleanup materials properly. • Do not use emulsifier or dispersant.
Shipboard process water handling.	Keep process and cooling water used aboard ships separate from sanitary wastes to minimize disposal costs for the sanitary wastes.
	Keep process and cooling water from contact with spent abrasives and paint to avoid pollution of the receiving water.
	Inspect connecting hoses for leaks.
Shipboard sanitary waste disposal.	Discharge sanitary wastes from the ship being repaired to the yard's sanitary system or dispose of by a commercial waste disposal company.
	Use appropriate material transfer procedures, including spill prevention and containment activities.
Bilge and Ballast water	Collect and dispose of bilge and ballast waters which contain oils, solvents, detergents, or other additives to a licensed waste disposal company.

Sources: EPA, Office of Water. 1993. "Guidance Specifying Management Measures for Survey of Nonpoint Pollution in Coastal Waters." 840–B–92–002.

University of South Alabama, College of Engineering. September 1992. Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities. College of Engineering Report No. 92–2.

NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.

4. Pollutant Control Measures Required Through Other EPA Programs

EPA recognizes that the Resource Conservation and Recovery Act (RCRA) and the Underground Storage Tank (UST) programs require careful management of materials used at Ship Building and Repairing Facilities and Boat Building and Repairing Facilities.

Under the RCRA program, on September 10, 1992, EPA promulgated standards in 40 CFR part 279 for the management of used oils that are recycled (57 FR 41566). These standards include requirements for used oil generators, transporters, processors/re-refiners, and burners. The standards for used oil generators apply to all generators, regardless of the amount of used oil they generate. Do-it-yourself (DIY) generators which generate used oil from the maintenance of their personal vehicles, however, are not subject to the management standards (Subsection 279.20(a)(1)).

The requirements for used oil generators were designed to impose minimal burden on generators while protecting human health and the environment from the risks associated with managing used oil. Under Subpart C of 40 CFR part 279, used oil generators must not store used oil in units other than tanks, containers, or units subject to regulation under Part 264 or 265 of 40 CFR 279.22(a). In other words, generators may store used oil in tanks or containers that are not subject to Subpart J (Hazardous Waste Tanks) or Subpart I (Containers) of Parts 264/265, as long as such tanks or containers are maintained in compliance with the used oil management standards. This does not preclude generators from storing used oil in Subpart J tanks or Subpart I containers or other units, such as surface impoundments (Subpart K), that are subject to regulation under Part 264 or 265.

Storage units at generator facilities must be maintained in good condition and labeled with the words "used oil." Upon detection of a release of used oil to the environment, a generator must take steps to stop the release, contain the released used oil, and properly manage the released used oil and other materials (Sections 279.22 (b)–(d)). Generators storing used oil in underground storage tanks are subject to the UST regulations (40 CFR part 280).

If used oil generators ship used oil offsite for recycling, they must use a transporter who has notified EPA and obtained an EPA identification number (Section 279.24).

The technical standards for USTs at 40 CFR part 280 require that new UST systems (defined as systems for which installation commenced after December 12, 1988) use overfill prevention equipment that will: (1) Automatically shut off flow into the tank when the tank is no more than 95 percent full; or (2) alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high level alarm. The preceding requirements do not apply to systems that are filled by transfers of no more than 25 gallons at one time. Existing UST systems (defined as systems for which installation has commenced on or before December 12, 1988) are required to have installed the described overfill prevention equipment by December 12, 1998.

5. Special Conditions

a. Prohibition of non-storm water discharges. This section of today's proposed permit does not authorize prohibited non-storm water discharges of wastewaters, such as bilge and ballast water, sanitary wastes, pressure washwater, and cooling water originating from vessels. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system.

6. Storm Water Pollution Prevention Plan Requirements

The conditions that apply to ship and boat building and repairing facilities build upon the requirements set forth in the baseline general permit for storm water discharges from industrial activities which was finalized on September 9, 1992 (57 FR 41236). The discussion which follows, therefore, only addresses conditions that differ from those required in the baseline permit.

a. Contents of the plan—(1) Description of potential pollutant sources. Under the description of potential pollutant sources in the storm water pollution prevention plan requirements, permittees are required to include the location(s) on their facility site map where engine maintenance and repair work, vessel maintenance and repair work, and pressure washing are performed. This requirement is the same as the baseline general permit, but here it is expressed in more appropriate terms for the ship and boat industry. Rather than requiring the location of "storage areas" as in the baseline general permit, this storm water pollution prevention plan specifies that the location of liquid storage areas (i.e., paint, solvents, resins) and material storage areas (i.e., blasting media, aluminum, steel) be shown.

(2) Measures and controls. Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm waters discharges shall be maintained in a clean and orderly manner. This section of today's proposed permit also proposes that the following areas be specifically addressed:

(a) Pressure washing area—When pressure washing is used to remove marine growth from vessels, the discharge water must be collected or contained and disposed of as required by the NPDES permit for this process water, if the discharge is to waters of the U.S. or through a municipal separate storm sewer. The plan must describe the measures to collect or contain the discharge from the pressure washing area, detail the method for the removal of the visible solids, describe the method of disposal of the collected solids, and identify where the discharge will be released (i.e., the receiving waterbody, storm sewer system, sanitary sewer system).

(b) Blasting and painting areas—To the maximum extent practical, all blasting and painting activities must be sufficiently contained to prevent abrasives, paint chips, and overspray from reaching a receiving waterbody or storm sewer system. The plan must describe measures taken at the facility to prevent or minimize the discharge of spent abrasive, paint chips, and paint into the receiving waterbody and storm sewer system. The facility may consider hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris. Where required, a schedule for cleaning storm systems to remove deposits of abrasive blasting debris and paint chips should be addressed within the plan. The plan should include any standard operating practices with regard to blasting and painting activities. Such items may include the prohibition of performing uncontained blasting and painting over open water or blasting and painting during windy conditions which can render containment ineffective.

(c) Material storage areas—All stored and containerized materials (fuels, paints, solvents, waste oil, antifreeze, batteries) must be stored in a protected, secure location away from drains and plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility must specify which materials are stored indoors and consider containment or

cover for materials that are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the containment measures in place to prevent leaks and spills. The facility must consider implementing an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous materials. Those facilities where abrasive blasting is performed must specifically include within the plan discussion on the storage and proper disposal of spent abrasive generated at the facility.

(d) Engine maintenance and repair areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for engine maintenance and repair. The facility must consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(e) Material handling areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from material handling operations and areas (i.e., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The facility must consider covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area, preferably indoors or under a shed; and minimizing runon of storm water to material handling areas. Where applicable, the plan must address the replacement or repair of leaking connections, valves, pipes, hoses, and soil chutes carrying wastewater from vessels.

(f) Drydock activities—The plan must address the routine maintenance and cleaning of the drydock to minimize the potential for pollutants in storm water runoff. The facility must describe the procedures for cleaning the accessible areas of the drydock prior to flooding and the final cleanup after the vessel is removed and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on the drydock must also be included within the plan. The facility must consider items such as sweeping rather than hosing off debris and spent blasting material from the accessible areas of the drydock prior to flooding and having absorbent materials and oil containment booms readily available to contain and cleanup any spills.

(g) General yard area—The plan must include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc., must be routinely removed from the general yard area. The facility must consider such measures as providing covered trash receptacles in each yard, on each pier, and on board each vessel being repaired.

These seven areas are the common sources of pollutants in storm water from ship building and repairing and boat building and repairing activities. Based upon Best Management Practices for the Shipbuilding and Repair Industry and for Bridge Maintenance Activities prepared by the College of Engineering at the University of South Alabama, the suggested management measures are commonly used at ship and boat facilities. EPA believes that the incorporation of management practices such as those suggested will substantially reduce the potential for these activities and areas to contribute pollutants to storm water discharges. In addition, EPA believes that these requirements will continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities. Many facilities will find that appropriate management measures are already employed at the facility because they have been required under an existing EPA program.

The preventive maintenance requirements specifically include the routine inspection of sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system. Because of the nature of operations occurring at ship and boat facilities, routine attention needs to be placed on the collection and proper disposal of spent abrasive, paint chips, and other solids.

In addition to the comprehensive site evaluation required under Part XI.R.3.a.(4) of today's proposed permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility, at a minimum, on a monthly basis. The following areas shall be included in all inspections: pressure washing area, blasting and painting areas, material storage areas, engine maintenance and repair areas, material handling areas, drydock area, and general yard area. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records shall be maintained.

The purpose of the inspections is to check on the implementation and effectiveness of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist is encouraged. The checklist will ensure that all required areas are inspected, as well as help to meet the record keeping requirements.

The permittee is required to identify semiannual (twice per year) dates for employee training. Employee training must, at a minimum address the following areas when applicable to a facility: Used oil management; spent solvent management; proper disposal of spent abrasives; proper disposal of vessel wastewaters, spill prevention and control; fueling procedures; general good housekeeping practices; proper painting and blasting procedures; and used battery management. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. The permittee is required to consider posting easy to read or graphic depictions of BMPs that are included in the plan as well as emergency phone numbers in the work areas. This practice will enhance employees understanding the pollutant control measures. Unlike some industrial operations, the industrial activities associated with ship and boat building and repair facilities that may affect storm water quality require the cooperation of all employees. EPA, therefore, is proposing to require that employee training take place at least twice a year to serve as:

(1) Training for new employees;

(2) A refresher course for existing employees;

(3) Training for all employees on any storm water pollution prevention techniques recently incorporated into the plan; and

(4) A forum for the facility to invite independent contractors and customers to inform them on pollution prevention procedures and requirements.

7. Numeric Effluent Limitation

There are no additional numeric effluent limitations beyond those described in Part VI. of this fact sheet.

8. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that ship and boat building and repairing

facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires ship and boat building and repairing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table R–5. The pollutants listed in Table R–5 were found to be above benchmark levels for a significant portion of ship and boat building and repairing facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from ship and boat building and repairing, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from ship and boat building and repairing facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table R–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE R–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Total Recoverable Copper .	0.009 mg/L
Total Recoverable Zinc	0.65 mg/L
Total Recoverable Arsenic .	0.000018 mg/L
Total Recoverable Iron	0.3 mg/L
Total Recoverable Lead	0.0337 mg/L
Nitrate+Nitrite as Nitrogen ..	0.68 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table R–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table R–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE R–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table R–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table R–5, then no further sampling is required for that parameter.
4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table R–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification.—Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges

before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at ship and boatbuilding or repair yard facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from ship and boat building and repair facilities. These notices specifically require that facilities with storm water discharges that are associated with ship and boat building and repair are required to monitor their storm water discharges for oil and grease, COD, TSS, and pH. Today's proposed permit contains different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for ship and boat building and repairing facilities in the September 1992 General Permits and those required in today's proposed permit.

9. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in part IX.R.8 of today's proposed permit.

a. Storm water discharges. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with activities identified in paragraphs XI.R.9.a.(1) and XI.R.9.a.(2) must monitor storm water discharges associated with industrial activity for the parameters identified in Table R–7 at least annually (1 time per year) except as provided in VI.A. (Sampling Waiver and Representative Discharge). In addition to the parameters listed, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

(1) Storm water discharges from boat building (including cutting, routing, forming, assembling, painting, varnishing, sanding and welding) or boat repairing (including engine repair and maintenance, vessel repair and maintenance, painting, blasting, sanding and welding) activities that are exposed to storm water;[122]

(2) Storm water discharges from ship building or repairing activities.[123]

TABLE R–7.—STORM WATER DISCHARGE PARAMETERS

Parameter	Unit	Frequency	Sample type
Total Flow	MGD	1/year	Estimate.
Oil & Grease	mg/L	1/year	Grab.

[122] According to the U.S. Coast Guard, a vessel 65 feet or greater in length is referred to as a ship, and a vessel smaller than 65 feet is a boat.

[123] According to the U.S. Coast Guard, a vessel 65 feet or greater in length is referred to as a ship, and a vessel smaller than 65 feet is a boat.

TABLE R–7.—STORM WATER DISCHARGE PARAMETERS—Continued

Parameter	Unit	Frequency	Sample type[1]
Chemical Oxygen Demand (COD)	mg/L	1/year	Grab.
Total Suspended Solids (TSS)	mg/L	1/year	Grab.
pH	standard	1/year	Grab.
Total Recoverable Copper	mg/L	1/year	Grab.
Total Recoverable Lead	mg/L	1/year	Grab.
Total Recoverable Zinc	mg/L	1/year	Grab.
Acute whole effluent toxicity[2]		1/year	Grab.
Any pollutant limited in an effluent guideline to which the facility is subject		1/year	Grab.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.
[2] The acute whole effluent toxicity shall be performed in accordance with Part XI.R.9.b. of this section.

b. Toxicity testing—(1) Test procedures—(a) The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater bodies. Due to the nonsaline nature of rainwater, freshwater should also be used for discharges to estuarine, marine, or other naturally saline waterbodies.

(b) All test organisms, procedures and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA/600/4–90/027, or the most current edition. The control water used will be moderately hard water as described in EPA/600/4–90/027, Table 6, or the most current edition.

(c) Tests shall be conducted annually (once per year) on a grab sample of the discharge. Test shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–27 (or the most current edition), Section 12, Report Preparation, and the report submitted to EPA with the Discharge Monitoring Reports (DMRs). On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(2) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected in the storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the sources of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

10. Cost Estimates

This section which covers ship building and repairing facilities and boat building and repairing facilities, does not include numeric effluent limits. The BMPs described within this section are designed to prevent or minimize pollutants in the storm water runoff. Facilities choose and implement the BMPs which best fit site specific requirements. Because this section does not contain numeric effluent limits or requirements to implement specific, predetermined BMPs, an economic achievable analysis is not required.

S. Storm Water Discharges Associated With Industrial Activity From Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities

1. Discharges Covered Under This Section

The storm water application regulations define "storm water discharges associated with industrial activity" in terms of eleven categories of industrial activities at 40 CFR 122.26(b)(14). Category (viii) of this definition includes transportation facilities classified as Standard Industrial Classifications (SIC) 40, 41, 42 (except 4221–25), 43, 44, 45 and 5171 that have vehicle and equipment maintenance shops, equipment cleaning operations, or airport deicing operations. The category further states that only those portions of the facility that are either involved in vehicle and equipment maintenance (including vehicle and equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations are associated with industrial activity. The conditions proposed in this section apply to facilities generally classified as SIC code 45 (airports, airport terminals and flying fields) which conduct the above described activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

a. Responsible parties. Airports typically operate under a single management organization known as the airport "authority" which in most cases is a public agency. As the operator of the facility, the airport authority is responsible for applying for an NPDES storm water permit. Airline companies and fixed base operators (e.g., fueling companies and maintenance shops) that have contracts with the airport authority to conduct business on airport property are referred to as "tenants" of the airport. Operations conducted by tenants, if described as industrial activities at 40 CFR 122.26(b)(14)(viii), must be in compliance with the conditions of this section. As such, a storm water pollution prevention plan developed in accordance with the requirements of Part XI.S.3. shall be

prepared for areas occupied by tenants of the airport facility who conduct industrial activities as described in Part XI. of today's proposed permit. Plans developed for areas of the airport facility occupied by tenants of the airport shall be integrated into the storm water pollution prevention plan for the entire airport facility.

While the case could be made that each tenant is responsible for the discharge of pollutants in storm water runoff from their areas of operations, it is the operator of the facility, the airport authority, that is responsible for the storm water discharges from the site. Thus, the airport authority is responsible for developing a storm water pollution prevention plan for the airport facility as well as ensuring that the facility as a whole is in compliance with the conditions of this section.

2. Pollutants Found in Storm Water Discharges

In general, the quantitative data submitted thus far has not raised any particular areas of concern with respect to discharges of pollutants resulting from vehicle maintenance and/or deicing operations conducted at airport facilities. However, EPA believes that the part 2 sampling data does not provide justification that discharges resulting from deicing operations are not a significant source of pollutants. The sampling requirements for part 2 of the group application did not specify that facilities must sample storm water discharges from areas where deicing activities occur and/or during times when such operations were being conducted. As a result, only one facility indicated that the sampling data submitted was collected from areas where deicing activities were being conducted. After reviewing recent case studies on the effects of glycol discharges to receiving waters, EPA reports and the results of FAA surveys, EPA believes that additional information on the discharges of deicing chemicals to receiving waters as a result of aircraft and runway deicing operations is warranted and necessary.

Both ethylene and propylene glycols exert high oxygen demands when released into receiving waters. As such, this section requires that facilities report both the Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) of discharges sampled at facilities that use at least 100,000 gallons or more of glycol-based deicing chemicals. The concentration of nitrogen and possibly ammonia are the concern with respect to deicing operations where urea is used. Therefore, this section requires that facilities subject to the monitoring requirements in Part XI.S.5. of the permit also report the concentration of Total Kjeldahl Nitrogen (TKN) in discharges sampled.

The results of the storm water survey conducted by FAA (June 1992) showed that 10 percent of the respondents who conduct deicing activities used more than 100,000 gallons of glycol based deicing chemicals during winter seasons. In addition, those facilities using more than 100,000 gallons of glycol based deicing chemicals accounted for 71 percent of the total amount of glycol based deicing chemicals reported in the survey. In a similar survey conducted by the American Association of Airport Executives, 4 percent of the airports conducting deicing activities used more than 100,000 gallons of ethylene glycol which represented approximately 76 percent of the total amount of ethylene glycol used by all airports surveyed.

3. Special Conditions

Today's proposed permit clarifies in Part XI.S.2. (Prohibition of Non-storm Water Discharges) that non-storm water discharges, including discharges from aircraft, ground vehicle and equipment washwaters, dry weather discharges from airport deicing/anti-icing operations, and dry weather discharges resulting from runway maintenance are not authorized under this section. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system. In a related requirement, the permittee is required to attach a copy of the NPDES permit issued for the discharge of non-storm water runoff or, if an NPDES permit has not yet been issued, a copy of the pending application to the plan. For facilities that discharge the waters mentioned above to a sanitary sewer system, the operator of the sanitary sewer system must be notified. A copy of the notification letter must be attached to the plan. If an industrial user permit has been issued under a pretreatment program, a copy of the permit must be attached to the plan as does any other permit to which the facility's discharge waters are subject.

4. Storm Water Pollution Prevention Plan Requirements

a. Contents of the plan. The pollution prevention plan requirements described below are in addition to those found under Part VI.C.

(*1*) *Description of potential pollutant sources.* In addition to the common pollution prevention plan requirements discussed in Part VI.C.2. (Drainage), the site map developed for an entire airport facility shall identify and indicate the location of each tenant of the facility conducting industrial activities as described in this section.

In addition to the pollution prevention requirements discussed in Part VI.C.2. (Summary of Potential Pollutant Sources), airport facilities, including areas operated by tenants of the facility that conduct industrial activities, must address the following specific operations and areas where the operations occur:

• *Aircraft deicing*—Includes both deicing to remove frost, snow or ice, and anti-icing which prevents the accumulation of frost, snow or ice. Deicing of an airplane is accomplished through the application of a freezing point depressant fluid, commonly ethylene glycol or propylene glycol, to the exterior surface of an airplane. Both ethylene and propylene glycol have high biochemical oxygen demands (BOD) when discharged to receiving waters. Environmental impacts on surface waters due to glycol discharges includes glycol odors and glycol contaminated surface water and ground water systems, diminished dissolved oxygen levels and fish kills.

The Federal Aviation Administration (FAA) recently conducted a survey which focused on aircraft and runway deicing operations being conducted at U.S. airports. Ninety-six airports responded to the survey and results are summarized in a final report dated June 1, 1992. In summary, 65 airports indicated the amounts of ethylene glycol used for aircraft deicing for the winter periods of 1989–90 and 1990–91 and the volumes used by each airport ranged significantly, from a few gallons to 520,000 gallons. The average annual volume of ethylene glycol used by all respondents for the winter periods of 1989–90 and 1990–91 was approximately 2,159,426 gallons.

The majority of aircraft deicing operations occur on the apron adjacent to the passenger terminal and runoff generally drains to a nearby storm water inlet. In fact, 31 of the respondents to the FAA survey indicated that 75 percent or more of the spent deicing chemicals were discharged to the storm sewer system. In general, the remainder of spent chemical resulting from aircraft deicing operations drained to ditches or open areas.

All aspects of aircraft deicing/anti-icing operations, including quantities used and stored, as well as application, handling and storage procedures are required to be addressed under the conditions of this section.

• *Runway deicing/anti-icing*—Includes deicing/anti-icing operations conducted on runways, taxiways and ramps. Runway deicing/anti-icing commonly involves either the application of chemical fluids such as ethylene glycol or propylene glycol, or solid constituents such as pelletized urea. Urea has a high nitrogen content, therefore degradation of urea in a receiving water causes an increase in nutrient loadings resulting in an accelerated growth of algae and eutrophic conditions. Under certain ambient conditions, the degradation of urea in receiving waters can also result in ammonia concentrations toxic to aquatic life.

The FAA's storm water survey indicated that, of the facilities that indicated using urea for runway deicing for the winter periods of 1989–90 and 1990–91, the amount of urea used during a single winter period ranged from 100 pounds to 1,450,000 pounds (715 tons). With regard to disposal of spent deicing chemicals from runways, taxiways and ramps, 20 airports directly discharged 50 percent or more of runoff from deicing areas to storm sewers. In response to question concerning collection and treatment of spent deicing chemicals from runway deicing activities, sixty facilities responded and only five facilities indicated that runoff from runway deicing operations was collected and treated.

All aspects of runway deicing/anti-icing operations, including quantities used and stored, as well as application, handling and storage procedures are required to be addressed under the conditions of this section.

• *Aircraft servicing*—Typically conducted on the apron area adjacent to the passenger terminal, the servicing of aircraft could potentially contribute pollutants to storm water. As a result of spills or leaks during the servicing of airplanes, fluids such as engine oil, hydraulic fluid, fuel and lavatory waste could potentially enter the storm water system and/or be discharged to receiving waters. All spillage other than potable water should be prevented from entering the storm sewer system.

• *Aircraft, ground vehicle and equipment maintenance and washing*—Maintenance activities included in this section include both minor and major operations conducted either on the apron adjacent to the passenger terminal, or at dedicated maintenance facilities. Potential pollutant sources from all types of maintenance activities includes spills and leaks of engine oils, hydraulic fluids, transmission oil, radiator fluids, and chemical solvents used for parts cleaning. In addition the disposal of waste parts, batteries, oil and fuel filters, and oily rags also have a potential for contaminating storm water runoff from maintenance areas unless proper management practices and operating procedures are implemented. The spent wash water from aircraft and ground vehicle washing activities could potentially be contaminated with surface dirt, metals, and fluids (fuel, hydraulic fluid, oil, lavatory waste).

• *Runway maintenance*—Over time, materials such as tire rubber, oil and grease, paint chips, and jet fuel can buildup on the surface of a runway causing a reduction in the friction of the pavement surface. When the friction level of the runway falls below a specific level, then maintenance on the runway must be performed. The Federal Aviation Administration (FAA) recommends several methods for removing rubber deposits and other contaminants from a runway surface including high pressure water, chemical solvents, high velocity particle impact, and mechanical grinding. If not properly managed, the materials removed from the runway surface could be discharged into nearby surface waters. Similarly, if chemical solvents are used in the maintenance operation, improper management practices could result in discharges of the chemical solvents in the storm water runoff from runway areas to nearby surface waters.

(*2*) *Measures and controls.* In addition to the common pollution prevention plan requirements discussed in Part VI.C.3. (Measures and Controls), this section specifies that permittees must address particular Best Management Practices (BMP) for specific areas and operations identified as potential sources of pollutants. This section further specifies that a schedule for implementation shall be provided for each BMP selected. The BMPs specified in this section are not intended to be the only alternative management practices considered by operators, simply the minimum to be considered. In most cases, the BMPs specified are common sense practices that are already in common practice at many airport facilities. As such, operators may only need to include the information in their storm water pollution prevention plan. Specific areas and industrial operations mentioned in this section and the corresponding BMPs for such areas are the following:

(*a*) *Aircraft, ground vehicle and equipment maintenance areas (including aircraft service areas)*—The plan must describe measures that prevent or minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance and servicing. Management practices such as performing all maintenance activities indoors, maintaining an organized inventory of materials used, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the apron or hangar floor, using dry cleanup methods in the event of spills, and/or collecting the storm water runoff from maintenance and/or service areas and providing treatment, or recycling should be considered.

(*b*) *Aircraft, ground vehicle, and equipment cleaning areas*—The plan must describe measures that prevent or minimize the contamination of the storm water runoff from all areas used for aircraft, ground vehicle, and equipment maintenance. Management practices such as performing all cleaning operations indoors, and/or collecting the storm water runoff from the area and providing treatment or recycling should be considered.

(*c*) *Aircraft, ground vehicle, and equipment storage areas*—The storage of aircraft, ground vehicles, and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize the contamination of storm water runoff from these areas. Management practices such as indoor storage of aircraft and ground vehicles, the use of drip pans for the collection of fluid leaks, and perimeter drains, dikes or berms surrounding storage areas should be considered.

(*d*) *Material storage areas*—Storage units of all materials (e.g., used oils, hydraulic fluids, spent solvents and waste aircraft fuel) must be maintained in good condition, so as to prevent contamination of storm water, and plainly labeled (e.g., "used oil," "Contaminated Jet-A," etc.). The plan must describe measures that prevent or minimize contamination of the storm water runoff from storage areas. Management practices such as indoor storage of materials, centralized storage areas for waste materials, and/or installation of berming and diking around storage areas should be considered for implementation.

(*e*) *Airport fuel system and fueling areas*—The plan must describe measures that prevent or minimize the discharge of fuels to the storm sewer resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Where the discharge of fuels into the storm sewer cannot be prevented, the plan shall indicate measures that will be employed to prevent or minimize the discharge of

the contaminated runoff into receiving surface waters.

(f) Source reduction—This section specifies that facilities which conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations shall evaluate present operating procedures to consider alternative practices which would reduce the overall amount of deicing/anti-icing chemical used and/or lessen the environmental impact of the pollutant source.

With regard to runway deicing/anti-icing operations, operators should begin by evaluating present chemical application rates to ensure against excessive over application. Devices which meter the amount of chemical being applied to runways help to prevent over application. Operators should also emphasize anti-icing operations which would preclude the need to deice; less chemical is required to keep ice off a runway than is required to remove ice from a runway. To further assist in implementing anti-icing procedures, operators should also consider installing runway ice detection systems (RID) otherwise known as "pavement sensors" which monitor runway temperatures. Pavement sensors provide an indication of when runway temperatures are approaching freezing conditions, thus alerting operators of the need to anti-ice. Deicing chemicals applied during extremely cold, dry conditions, are often ineffective since they do not adhere to the ice surface and may be scattered as a result of windy conditions or aircraft movement. In an effort to improve the efficiency of the application, operators should consider pre-wetting the deicing chemical to improve the adhesion to the iced surface.

With regard to substitute deicing/anti-icing chemicals for runway use, operators should consider using chemicals which have less of an environmental impact on receiving waters. Potassium acetate, has a lower oxygen demand than glycol, is nontoxic to aquatic habitat or humans, and was approved by the FAA for runway deicing operations in November, 1991 (AC No. 150/5200–30A CHG 1).

In considering alternative management practices for aircraft deicing/anti-icing operations, operators should evaluate present application rates to ensure against excessive over application. In addition, operators may consider pretreating aircraft with hot water or forced air prior to the application of chemical deicer. The goal of this management practice is to reduce the amount of chemical deicer used during the operation. This management practice alone is not sufficient since discharges of small concentrations of glycol can have significant effects on receiving waters. It is, however, an effective measure to reduce the amount of glycol needed per operation.

(g) Management of runoff—A number of reports developed for EPA (Guidance For Issuing NPDES Storm Water Permits For Airports, September 28, 1991) and Federal Aviation Administration (FAA) Advisory Circulars (AC 150–5320–15) indicate that the most common location for deicing/anti-icing aircraft at U.S. airports is along the apron areas where mobile deicing vehicles operate from gate to gate. In a recent FAA survey of deicing operations at U.S. airports (June 1992), the majority of respondents indicated that spent deicer chemicals from aircraft deicing operations either drain to the storm sewer system, open areas, or are left to evaporate on the ramp.

This section specifies that facilities shall provide a narrative description of BMPs to control or manage storm water runoff from areas where deicing/anti-icing operations occur in an effort to minimize or reduce the amount of pollutants being discharged from the site. For example, when deicing operations are conducted on aircraft during periods of dry weather, operators should ensure that storm water inlets are blocked to prevent the discharge of deicing chemical in the storm sewer system. Mechanical vacuum systems or other similar devices can then be used to collect the spent deicing chemical from the apron surface for proper disposal. Establishing a centralized deicing station would also provide better control over aircraft deicing operations in that it enables operators to readily collect spent deicing chemicals.

Once spent deicer chemicals are collected, operators can then select from various methods of disposal such as:

(i) Disposal to sanitary sewage facility—Because glycols are readily biodegradable, runoff can be treated along with sanitary sewage. The receiving treatment plant would, however, have to have the capacity to handle the hydraulic load as well as the additional biochemical oxygen demand associated with the deicing chemical. Measurements have shown that the average oxygen demand for glycol is between 400,000 and 600,000 mg O_2/L even if diluted per fluid manufacturers specifications (FAA AC 150–5320–15 CHG 1, 1991). To lessen both the increased hydraulic and pollutant loads due to runoff from airport deicing operations, retention basins may be located at the airport facility.

(ii) Retention and detention ponds—Conversion of suitable unused airport land into retention or detention basins allows for collection of large volumes of glycol waste from pavement surface runoff. The design capacity for such basins should at least handle surface runoffs for winter months noting the decreased microbial activity during the winter season which is needed for biodegradation, plus additional capacity for runoff during thawing periods. Continuous aeration would supply required oxygen and allow for faster biodegradation and release of glycol waste, which may reduce capacity requirements. Metering the discharge of flow from an onsite basin allows the operator to better control the rate of flow during peak flight hours and to avoid BOD shock loadings to a sanitary treatment facility or a surface water.

(iii) Recycling—Glycol recycling provides operators with a chemical cost savings since recaptured glycol can be sold or reused for other nonaircraft applications (FAA AC 150–5320–15, February 1991). Studies indicate that collected deicing chemicals which have glycol concentrations ranging from 15 to 25 percent can be cost effectively recycled. The optimal conditions for collecting the highest concentration of glycol in spent deicing fluid is directly from the apron or centralized deicing station when deicing operations are conducted during dry weather or light precipitation events. Deicing chemicals discharged to retention basins which are then allowed to mix with additional surface runoff typically result in glycol concentrations well below the acceptable range for recycling. There are, however, methods of physical separation presently available which increase the concentration of glycol and allow operators to recover a relatively reusable product.

(h) Inspections—In addition to the common pollution prevention plan requirements discussed in Part VI.C.3. (Inspections), airport authorities shall inspect (1) designated equipment and areas of the facility occupied by tenants who conduct industrial activities as described in this section on a quarterly basis, and (2) equipment and areas involved in deicing/anti-icing operations on a weekly basis during periods when deicing/anti-icing operations are being conducted.

(i) Pollution prevention training—Pollution Prevention training programs shall inform airport management and tenant personnel responsible for implementing activities identified in the storm water pollution prevention plan, as well as tenants of the airport facility, of the components and goals of the plan.

Training should address topics such as spill response, good housekeeping, material management practices and deicing procedures. The pollution prevention plan shall identify periodic dates for such training.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) Confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of today's proposed permit. Comprehensive site compliance evaluations must be conducted at least annually. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

5. Numeric Effluent Limitation

There are no additional numerical limitations beyond those in Part VI.F. of this fact sheet.

6. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that airports may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires airport facilities that use 100,000 gallons or more of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis to collect and analyze samples of their storm water discharges from areas where deicing/anti-icing activities occur for the pollutants listed in Table S–1. The pollutants listed in Table S–1 were found to be above benchmark levels for a significant portion of airport facilities that use 100,000 gallons or more of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from airport facilities that use 100,000 gallons or more of glycol-based deicing chemicals and/or 100 tons or more of urea on an average basis, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from airport facilities that use 100,000 gallons or more of glycol-based deicing chemicals and/or 100 tons or more of urea on an average basis must be monitored four times during the second year of permit coverage when deicing/anti-icing activities are occurring and from outfalls that receive storm water runoff from those areas. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table S–1. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE S–1.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Biochemical Oxygen Demand (BOD_5).	9 mg/L
Chemical Oxygen Demand (COD).	65 mg/L
Total Kjeldahl Nitrogen (TKN).	1.50 mg/L
pH	6.5 to 9 s.u.

If the average concentration for a parameter is less than or equal to the value listed in Table S–1, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table S–1, then the permittee is required to conduct monitoring four times for that parameter while deicing operations are occurring in the fourth year of the permit. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE S–2.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table S–1, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table S–1, then no further sampling is required for that parameter.
4th Year of Permit Coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table S–1. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water

discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

In determining if the airport is subject to the monitoring requirements, operators must determine the "average annual usage rate" of deicing/anti-icing chemicals at their particular facility. The "average annual usage rate" is determined by averaging the total amounts of deicing/anti-icing chemicals used at the facility in the 3 previous calendar years. The total amount of deicing chemicals used at an airport facility is the cumulative amount used by the airport authority and each tenant of the airport facility.

Airport facilities which use less than 100,000 gallons of glycol based deicing chemicals and/or less than 100 tons of urea on an average annual basis are not required to monitor discharges resulting from deicing activities. The objective in establishing a minimum glycol usage cutoff from monitoring requirements is to prevent overly burdensome monitoring requirements on smaller airports that may use smaller amounts of deicing chemicals and do not have the operating budget to support monitoring and reporting requirements. In addition, a survey conducted by the American Association of Airport Executives (AAAE) of association members, revealed that airports which use less than 20,000 gallons of deicing chemicals account for less than 6 percent of the total amount of deicing chemicals used nationwide.

All facilities that conduct aircraft and/or runway deicing/anti-icing operations shall prepare estimates for annual pollutant loadings resulting from discharges of spent deicing chemicals from the facility. The loading estimates shall reflect the amounts of deicing chemicals discharged to separate storm sewer systems or surface waters, prior to and after implementation of the facility's storm water pollution prevention plan. The purpose of these estimates is to calculate the net reduction in deicing chemicals loadings to receiving streams. Such estimates shall be reviewed by a Registered Professional Engineer, and certified by such engineer. By means of the certification, the engineer, having examined the facility's, deicing procedures, and proposed control measures described in the storm water pollution prevention plan, shall attest that the loading estimates have been prepared in accordance with good engineering practices. Pollutant loading estimates developed during the life of the permit (before, during and after plan implementation) will enable the operator as well as the permitting authority to evaluate the effectiveness of control measures outlined in the facilities storm water pollution prevention plan in reducing or eliminating discharges of deicing chemical from the site.

f. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from airports with over 50,000 flights per year. These notices specifically require that facilities with storm water discharges that are associated with airports are required to monitor their storm water discharges from aircraft or airport deicing areas for oil and grease, BOD, COD, TSS, pH, and the primary

ingredient used in the deicing material. Today's proposed permit contains slightly different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for airports in the September 1992 General Permits and those required in today's proposed permit.

7. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.S.5. of today's proposed permit.

a. During the period beginning on the effective date and lasting through the expiration date of this permit, facilities which conduct aircraft and/or runway deicing/anti-icing operations and use:

(1) Less than 100,000 gallons of glycol based deicing chemicals and/or less than 100 tons of urea on an average annual basis, shall prepare annual pollutant loading estimates for discharges of spent deicing chemicals from the facility. The loading estimates shall reflect the amounts of deicing chemicals discharged to separate storm sewer systems or surface waters, prior to and after implementation of the facility's storm water pollution prevention plan. Such estimates shall be reviewed by a Registered Professional Engineer, and certified by such engineer. By means of the certification, the engineer, having examined the facility's, deicing procedures, and proposed control measures described in the storm water pollution prevention plan, shall attest that the loading estimates have been prepared in accordance with good engineering practices. Certified loading estimates are to be retained at the airport facility and attached to the storm water pollution prevention plan.

(2) 20,000 gallons or more but less than 100,000 gallons of glycol based deicing chemicals and/or 25 tons or more but less than 100 tons of urea on an average annual basis, in addition to the complying with the requirements listed in part XI.S.7., shall monitor outfalls from the facility which collect runoff from areas where deicing/anti-icing activities occur at least once annually (1 time per year). Permittees shall monitor such discharges when the highest concentration of deicing chemicals is expected to be discharged from the site.

(3) 100,000 gallons or more of glycol based deicing chemicals and/or 25 tons or more of urea on an average annual basis, shall monitor outfalls from the facility which collect runoff from areas where deicing/anti-icing activities occur. Such outfalls shall be monitored on a weekly basis during the months of December, January, and February as discharges containing deicing chemicals occur.

For the purposes of today's permit, the "average annual" usage rate of deicing/anti-icing chemicals is determined by averaging the amounts of deicing/anti-icing chemicals used at the facility in the 3 previous calendar years.

b. In addition to the parameters listed in Table S–3, the permittee shall provide the date the sample was taken; the amount (in gallons) of deicing/anti-icing chemicals used during the monitoring period; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE S–3.

Parameter	Unit	Frequency	Sample
Biochemical Oxygen Demand (BOD_5)	mg/L	Annual	Grab.
Chemical Oxygen Demand (COD)	mg/L	Annual	Grab.
Total Kjeldahl Nitrogen (TKN)	mg/L	Annual	Grab.
pH	Standard	Annual	Grab.

c. Sample type. Data shall be reported for a Grab. sample.

d. Reporting: when to submit—(1) Facilities identified in Parts XI.S.7.a. (2) and (3) are not required to submit monitoring results, unless required in writing by the Director. Monitoring results shall be recorded on Discharge Monitoring Report (DMR) form(s). DMR form(s) shall be retained with the pollution prevention plan.

This section of today's proposed permit requests public input on alternative strategies to the monitoring requirements discussed above. Alternatives, whether modifications to the proposed monitoring requirements or completely different approaches, should reflect the overall objectives of this section, mainly to evaluate the effectiveness of the storm water pollution prevention plan, and to characterize the pollutant loadings on receiving waters due to runoff from areas where deicing operations are conducted.

T. Storm Water Discharges Associated With Industrial Activity From Treatment Works

1. Discharges Covered Under This Section

On November 16, 1990 (55 FR 47990), the U.S. Environmental Protection Agency (EPA) promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition includes point source discharges of storm water from eleven categories of facilities, including "* * * (ix) treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more or required to have an approved pretreatment program under 40 CFR part 403."

This section establishes special conditions for storm water discharges associated with industrial activity from treatment works treating domestic sewage with a design flow of 1.0 mgd or more, or for treatment works that are required to have an approved pretreatment program under 40 CFR Part 403, or for those having land dedicated to the disposal of sewage sludge within the confines of the facility. Please note that storm water discharges from farm lands, domestic gardens, or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the Clean Water Act (CWA), are not currently regulated under the Federal storm water regulations.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the

other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Industry Profile

Wastewater treatment plants remove organic and inorganic contaminants from domestic sewage and sludge. This section provides a description of the treatment processes for reducing pollutants in domestic sewage. The operations are basically the same at all treatment plants and may be categorized by three general processes: primary treatment, secondary treatment, and tertiary treatment.

- *Primary Treatment*—The objective of primary treatment is the removal of suspended organic pollutants. This typically involves at least one of the following operations: screening, grit removal, and sedimentation. Chemical processes, such as disinfection, may also occur during primary treatment operations.
- *Secondary Treatment*—The objective of secondary treatment is further removal of settleable solids and soluble organic matter. The operations employed during secondary treatment include biological oxidation via suspended growth or fixed film processes, such as activated sludge, rotating biological contractors or trickling filters.
- *Tertiary Treatment*—The objectives of tertiary treatment include further treatment of wastewater, such as removal of suspended solids by filtration; removal of nutrients, such as phosphorus and nitrogen, typically through chemical additions and biological processes, or by selective ion exchange; and further removal of pollutants through activated carbon treatment.

Prior to discharge into a receiving water body, treated wastewater is disinfected using chlorination followed by dechlorination. Sludge produced during primary and secondary treatment is commonly combined, thickened, stabilized, and then mechanically dewatered. Sludge is aerobically or anaerobically stabilized by adjusting the pH with lime. This is followed by dewatering process where a polymer is added to condition the sludge for dewatering. Sludge is often stored onsite in piles exposed to weather, until final disposal (e.g., surface disposal, or incineration). When sludge is to be land applied, sludge drying beds or composting piles may be exposed to precipitation. In cases where sludge is incinerated onsite of the treatment plant, ash piles or impoundments may be exposed to precipitation.

3. Pollutants Found in Storm Water Discharges From Treatment Works

The impact of industrial activities at treatment works on storm water discharges will vary. Factors at a site which influence the water quality include geographic location, hydrogeology, the industrial activities exposed to storm water discharges, the facility's size, the types of pollution prevention measures/best management practices in place, and the type, duration, and intensity of storm events. Taken together or separately, these factors determine how polluted the storm water discharges will be at a given facility. For example, caustic soda may be significant source of pollutants at some facilities, while incinerator ash may be the primary pollutant source at others. Additionally, pollutant sources other than storm water, such as illicit connections, spills, and other improperly dumped materials, may increase the pollutant loading discharged into Waters of the United States.

Table T–1 lists industrial activities that commonly occur at treatment works, common pollutant sources at these facilities, and pollutants that are associated with these sources. Table T–1 identifies parameters as potential pollutants of concern associated with facilities covered by this section.

TABLE T–1.—DESCRIPTION OF INDUSTRIAL ACTIVITIES, POTENTIAL POLLUTANT SOURCES, AND POSSIBLE POLLUTANTS

Activity	Pollutant source	Pollutant
Preparation of biological and physical treatment processes.	Spills and leaks of process chemicals ..	Disinfectants, polymers and coagulants, alum, ferric chloride, soda ash, lime, sodium aluminate, sodium hypochlorite, caustic soda.
Soil amending and grass fertilizing	Over fertilizing	Commercial brands of balance fertilizers (6–6–6, 8–8–8 or 12–12–12), commercial sludge based products, nitrogen, other nutrients, phosphorous, ammonia.
Liquid storage in above ground storage ..	External corrosion and structural failure	Aluminum sulfate, liquid chlorine, liquid polymer, fuel, oil.
	Installation problems	Aluminum sulfate, liquid chlorine, liquid polymer, fuel, oil.
	Spills and overfills due to operator error	Aluminum sulfate, liquid chlorine, liquid polymer, fuel, oil.
	Failure of piping systems (pipes, pumps, flanges, couplings, hoses, and valves).	Aluminum sulfate, liquid chlorine, liquid polymer, fuel, oil.
	Leaks or spills during pumping of liquids from barges, trucks, or rail cars to a storage facility.	Aluminum sulfate, liquid chlorine, liquid polymer, fuel, oil.
Pest control	Large quantities of pesticide application, pesticide storage.	Diazanon, malathion, amdro, dimethylphthalate, diethyl phthalate, dichlorvos, carbaryl, skeetal, batex, liquid copper.
Sludge drying beds	Sludge	Nitrate, TDS, TSS, ammonia.
Sludge storage piles	Sludge	Nitrate, TDS, TSS, ammonia.
Sludge transfer	Sludge, vehicles, transfer equipment	Nitrate, TDS, TSS, oil, fuel, hydraulic fluids, ammonia.
Incineration	Ash impoundments/piles	Heavy metals, TDS, TSS.

TABLE T–1.—DESCRIPTION OF INDUSTRIAL ACTIVITIES, POTENTIAL POLLUTANT SOURCES, AND POSSIBLE POLLUTANTS—Continued

Activity	Pollutant source	Pollutant
Miscellaneous	Grit and scum piles from clarifiers, screens, exposed soil.	TSS, heavy metals, fecal coliform, nitrate, TSS.

Sources: EPA, Risk Reduction Engineering Lab, Cincinnati, OH, and U.S. of America National Committee for Representation of the United States to the International Association of Water Pollution Research and Control. November 1989. "Developments at International Conference on Water Pollution Research (14th)." EPA/600/2–89/059.

EPA, Office of Water Program Operations. June 1983. "Need Survey, 1982. Conveyance, Treatment, and Control of Municipal Wastewater, Combined Sewer Overflows, and Storm water Runoff: Summaries of Technical Data." EPA/430/9–83/002.

EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.

EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

Part 2 group application data that was statistically summarized indicated large variations in the minimum and maximum values reported for each of the eight conventional pollutants monitored:

- Grab sample values for nitrate plus nitrite nitrogen ranged from 0.0 mg/L to 427 mg/L.
- Grab and flow weighted composite samples for BOD both ranged from 0.0 mg/L to 1300 mg/L.
- Oil and grease values ranged from 0.0 mg/L to 1210 mg/L.
- Grab sample values for Total Suspended Solids (TSS) ranged from 0.0 mg/L to 1836 mg/L, and flow-weighted composite sample values ranged from 3.0 mg/L to 844 mg/L.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. However, the values were typically low relative to other sectors in today's proposed permit. EPA believes that Nitrate plus Nitrite Nitrogen and phosphorous are parameters of concern at treatment works. Less than 20 percent of the sampling facilities reported fecal coliform above the most stringent storm water effluent guideline limitation, and therefore, EPA has concluded that fecal coliform is not a pollutant of concern at treatment works. Table T–2 indicates the sampling results for the conventional and toxic pollutants that were statistically analyzed by EPA. This table indicates the minimum and maximum values, means, medians, 99th percentiles, and the total number of samples analyzed for each of the conventional pollutants.

TABLE T–2.—STATISTICS FOR STORM WATER POLLUTANTS, MG/L FOR TREATMENT WORKS

Pollutant	No. of Samples[1]		Mean		Minimum		Maximum		Median		99th Percentile	
Sample Type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	90	89	33.26	46.11	0.00	0.000	1300.00	1300.00	11.500	8.000	1300.00	1300.00
COD	84	82	133.03	157.95	0.65	0.000	1900.00	2000.00	68.650	61.685	1900.00	2000.00
Nitrate plus nitrite nitrogen	84	83	20.86	20.50	0.00	0.670	427.00	396.78	1.090	0.870	427.00	396.78
Nitrogen, total kjeldahl	79	78	8.10	4.74	0.00	0.000	213.00	150.00	1.520	1.330	213.00	150.00
Oil & grease	89	N/A	24.24	N/A	0.00	N/A	1210.00	N/A	0.900	N/A	1210.00	N/A
pH	82	N/A	N/A	N/A	0.37	N/A	8.85	N/A	N/A	N/A	8.85	N/A
Total phosphorus	86	84	0.95	0.68	0.00	0.000	9.50	5.92	0.500	0.445	9.50	5.92
Total suspended solids	90	88	160.17	114.44	0.00	3.000	1836.00	844.69	68.100	55.500	1836.00	844.69
Ammonia	25	25	1.162	1.252	0.00	0.00	6.2	6.1	0.810	0.69	6.2	6.1
Copper	27	26	0.072	0.053	0.00	0.00	0.78	0.56	0.013	0.021	0.78	0.56
Iron	7	7	1.108	1.41	0.00	0.300	0.385	2.7	0.385	0.501	2.7	4.8
Manganese	6	6	0.187	0.146	0.03	0.00	0.44	0.36	0.14	0.082	0.44	0.36
Zinc	22	21	0.238	0.12	0.00	0.00	1.4	0.48	0.067	0.062	1.4	0.48

[1] The number of samples reported include only those samples that were not reported as a nondetect or at the detection limit of the methodology.
[2] Composite samples.

4. Options for Controlling Pollutants

Part 1 group application data indicate that BMPs have not been widely implemented at the representative sampling facilities. Less than 3 percent of the sampling subgroup reported that they cover loading areas, storage areas, or material handling areas; approximately 10 percent reported that they use containment; less than 4 percent of the representative facilities use concrete pads. The most commonly listed (approximately 15 percent) material management practice is catch basins. Because BMPs described in part 1 data are limited, the following table is provided to identify BMPs associated with activities that routinely occur at treatment works.

TABLE T–3.—GENERAL STORM WATER BMPS FOR TREATMENT WORKS

Activity	BMPs
Preparation of biological and physical treatment process.	Use drip pans under drums and equipment where feasible.
	Store process chemicals inside buildings.
	Inspect the storage yard for filling drip pans and other problems regularly.
	Train employees on procedures for storing and inspecting chemicals.
Soil amending and grass fertilizing ..	Use the appropriate amount of fertilizer.
	Do not over fertilize.
	Train employee on proper fertilizing techniques.
Liquid storage in above ground storage containers.	Maintain good integrity of all storage containers.
	Install safeguards (such as diking or berming) against accidental releases at the storage area.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Pest control	Minimize pesticide application.
	Only apply pesticide if needed.
	Train employees on proper pesticide application.
Sludge drying beds	Ensure drying bed is draining properly (e.g., check for clogging); avoid overfilling drying bed; grade the land to divert flow around drying bed; berm, dike, or curb drying bed areas; cover drying beds.
Sludge storage piles	Confine storage of sludge to a designated area as far from any receiving water body as possible; store sludge on an impervious surface (e.g., concrete pad); grade the land to divert flow around storage piles; berm, dike, or curb sludge storage piles; cover sludge storage piles.
Sludge transfer	Promptly remove any sludge spilled during transfer; conduct transfer operations over an impervious surface; avoid transferring sludge during rain events; grade the land to divert flow around transfer areas; berm, curb, or dike transfer areas; avoid locating transfer operations near receiving water bodies.
Incineration—ash impoundments/piles.	Line ash impoundments with clay (or other type of impervious material); ensure ash impoundments will hold maximum volume of ash and a 10-year, 24-hour rain event; curb, berm, or dike ash storage areas; avoid locating ash storage areas near receiving water bodies.
Miscellaneous	Properly dispose of grit/scum; properly dispose of screens on a daily basis; maximize vegetative cover to stabilize soil and reduce erosion.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.
EPA, Office of Research and Development. May 1992. "Facility Pollution Prevention Guide." EPA/600/R–92/088.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.
U.S. Postal Service. May 1992. "NPDES/Storm Water Guide." AS–554.

5. Special Conditions

There are no additional requirements under this section other than those stated in the general fact sheet language.

6. Storm Water Pollution Prevention Plan Requirements

There are no additional requirements under this section other than those described in Part VI.C. of this fact sheet.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that treatment works may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires treatment works to collect and analyze samples of their storm water discharges for the pollutants listed in Table T–4. The pollutants listed in Table T–4 were found to be above benchmark levels for a significant portion of treatment works that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from facilities covered under this section, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from treatment works must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table T–4. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE T–4.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Total phosphorus	0.33 mg/L
Nitrate + nitrite nitrogen	0.68 mg/L

TABLE T–4.—INDUSTRY MONITORING REQUIREMENTS—Continued

Pollutants of concern	Cut-off concentration
Ammonia	0.0925 mg/L
Total recoverable copper	0.009 mg/L
Total recoverable iron	0.3 mg/L
Total recoverable manganese	0.05 mg/L
Total recoverable zinc	0.065 mg/L

If the average concentration for a parameter is less than or equal to the value listed in Table T–4, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table T–4, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE T–5.—SCHEDULE OF MONITORING

2nd year of permit coverage	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table T–4, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table T–4, then no further sampling is required for that parameter.
4th year of permit coverage	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table T–4. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will be used to reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, and significant materials from past industrial activity that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each sampling year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual

inspections are required of a storm water discharge from each outfall at the treatment works. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan. The pollutants selected for consideration and the associated rationale are as follows:

• *Nitrate plus nitrite nitrogen*—Nitrates plus nitrites are produced as a result of the oxidation, via-biodegradation, of ammonia nitrogen and organic nitrogen. Nitrates are considered to be poisonous substances in mineralized water. Nitrates and nitrites have been found to contribute to methemoglobinemia in infants. Concentrations of more than 10 mg/L of nitrates in water should not be ingested by infants.

Nitrate plus nitrite nitrogen is considered to be a pollutant of concern for treatment works. Nitrate plus nitrite nitrogen data submitted in part 2 storm water permit applications for treatment works indicate the following:

—The mean concentrations for grab and composite samples were 20.86 mg/L and 20.50 mg/L, respectively;

—The median concentrations for grab and composite samples were 1.09 mg/L and 0.87 mg/L, respectively;

—The 99th percentile concentrations (i.e., 99 percent of the values are below) for grab and composite samples were 213 mg/L and 150 mg/L, respectively.

• *Heavy metals*—As required by 40 CFR 122.26(g)(ii) and (iii), group applicants were only required to sample for metals if the facility knew or had reason to believe they would be expected in the discharge. Of the part 2 data which was statistically summarized, less than 20 percent of the facilities submitting data reported on heavy metals. EPA is requiring permittees to monitor for ammonia, total copper, total iron, manganese, and total zinc. The median grab sample values for these parameters submitted for part 2 of the application are: 0.810 mg/L; 0.013 mg/L; 0.385 mg/L; 0.14 mg/L; and 0.067 mg/L, respectively.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.T.5. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees covered by this section, as defined by paragraph XI.T.1. must monitor for the parameters identified in Table T–6. Monitoring should occur at least annually (once per year) except as provided in VI.E.7. (Sampling Waiver) and VI.E.6. (Representative Discharge). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE T–6.

Parameter	Unit	Frequency	Sample type[1]
Total flow	mg	1/year	Estimate.
Oil & grease	mg/L	1/year	Grab.
Total Suspended Solids (TSS)	mg/L	1/year	Grab.
Biochemical Oxygen Demand (BOD5)	mg/L	1/year	Grab.
pH	standard	1/year	Grab.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

b. Quarterly visual examination of storm water quality—(1) Facilities shall perform and document a visual examination of storm water quality of each storm water discharge associated with industrial activity from the site. If the storm water flows such that there are numerous small points of discharge, one sample may be collected as a

representative of the adjacent flows. The examination must be made at least once in each designated period (described in Part (2) below) during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(2) Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

(3) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information must be maintained onsite and include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

U. Storm Water Discharges Associated With Industrial Activity From Food and Kindred Products Facilities

1. Discharges Covered Under This Section

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharges associated with industrial activity." This definition included point source discharges of storm water from 11 major categories of facilities, including: "* * * (xi) Facilities under Standard Industrial Classifications 20, 21 * * *."

This section covers storm water discharges associated with industrial activities from establishments manufacturing or processing foods and beverages for human consumption, and related products, and prepared feeds for animals and fowls. This section also covers establishments engaged in manufacturing cigarettes, cigars, and other tobacco products. Food and kindred products processing facilities subject to requirements under this section include the following types of operations (i.e., subsectors):

- Meat Products (SIC Codes 2011, 2013, and 2015)
- Dairy Products (SIC Codes 2021, 2022, 2023, 2024, and 2026)
- Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties (SIC Codes 2032, 2033, 2034, 2035, 2037, and 2038)
- Grain Mill Products (SIC Codes 2041, 2043, 2044, 2045, 2046, 2047, and 2048)
- Bakery Products (SIC Codes 2051, 2052, and 2053)
- Sugar and Confectionery Products (SIC Codes 2061, 2062, 2063, 2064, 2066, 2067, and 2068)
- Fats and Oils (SIC Codes 2074, 2075, 2076, 2077, and 2079)
- Beverages (SIC Codes 2082, 2083, 2084, 2085, 2086, and 2087)
- Miscellaneous Food Preparations and Kindred Products (SIC Codes 2091, 2092, 2095, 2096, 2097, 2098, and 2099)
- Tobacco Products (SIC Codes 2111, 2121, 2131, and 2141).

Storm water discharges covered by this section include discharges from industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas for raw materials and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and where the aforementioned areas are exposed to storm water.

This section does not cover any discharges subject to effluent limitations guidelines, including storm water that combines with process wastewater. Also, storm water that does not come into contact with any raw material, intermediate product, finished product, by-product, or waste product located on the site of the operation are not subject to permitting under this section according to 40 CFR 122.26(b)(14).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Industry Profile

From subsectors comprising the Food and Kindred Products Sector, as of January 1, 1993, 26 Part 2 Group Storm Water Applications were received from 9 of the 10 industrial subsectors (excluding tobacco products) and 31 different primary SIC Codes. Subsector descriptions for all facilities within the Food and Kindred Products sector are as follows:

a. Meat products subsector (SIC Code 201X). The Meat Products subsector is separated into three segments. These include meat packing plants (SIC 2011); sausages and other prepared meat products (SIC 2013); and poultry slaughtering and processing (SIC 2015). All three of the industrial segments submitted group application information. Production related activities for these segments include stockyards, slaughtering (killing, blood processing, viscera handling, and hide processing), cutting and deboning, meat processing, rendering, and materials recovery.

b. Dairy products subsector (SIC Code 202X). The Dairy Products subsector is separated into five segments. These segments include creamery butter; natural, processed, and imitation cheese; dry, condensed, and evaporated dairy products; ice cream and frozen desserts; and fluid milk. All five of the industrial segments submitted group application information. Although a variety of operations are encountered in the Dairy Products subsector, the initial operations (e.g., receiving stations, clarification, separation, and pasteurization) are common to most dairy plants and products. However, after these initial operations, the processes and equipment become highly dependent on the product segments. These operations may include: culturing, churning, pressing, curing, blending, condensing, sweetening, drying, milling, and packaging.

c. Canned frozen and preserved fruits, vegetables, and frozen specialties subsector (SIC code 203X). The Canned Frozen and Preserved Fruits, Vegetables,

and Frozen Specialties subsector is separated into six segments. They include canned specialties; canned fruits, vegetables, preserves, jams, and jellies; dried and dehydrated fruits, vegetables, and soup mixes; pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings; frozen fruits, fruit juices, and vegetables; and other frozen specialties. Five of the six segments are represented in the part 2 application information with the pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings being the lone segment not represented in the part 2 data by a primary SIC Code (although this segment is represented as a secondary SIC Code). All of the facilities use various fruits or vegetables as the primary raw material. Sweeteners, such as sugar and corn syrup, are used as secondary raw materials. Typically, fruits and vegetables are washed, cut, blanched, and cooked prior to being classified as finished product. Additional operations may include drying, dehydrating, and freezing.

d. Grain mills subsector (SIC code 204X). The Grain Mills subsector is separated into seven segments. These include flour and other grain mill products; cereal breakfast foods; rice milling; prepared flour mixes and doughs; wet corn milling; dog and cat food; and prepared feeds and feed ingredients for animals and fowls, except dogs and cats. Six of the seven segments are represented in the part 2 application information with the rice milling segment being the lone segment not represented in the part 2 data by a primary SIC Code. Process operations performed in the grain mill subsector include: washing, milling, debranning, heat treatment (i.e., steeping, parboiling, drying and cooking), screening, shaping (i.e., extruding, grinding, molding, and flaking), and vitamin and mineral supplementing.

e. Bakery products subsector (SIC code 205X). The Bakery Products subsector is separated into three segments. These include the following industrial activities: Bread and other bakery products, except cookies and crackers; cookies and crackers; and frozen bakery products, except bread. All three segments are represented in the part 2 application information by a primary SIC Code. Process operations in this subsector include mixing, shaping of dough, cooling, and decorating.

f. Sugar and confectionery subsector (SIC Code 206X). The Sugar and Confectionery subsector is separated into seven segments. These include the following industrial activities: Cane sugar, except refining; Cane sugar refining; beet sugar; candy and other confectionery products; chocolate and cocoa products; chewing gum; and salted and roasted nuts and seeds. Only two of the seven segments are represented in the part 2 application information (i.e., candy and other confectionery products and chocolate and other cocoa products). The primary raw materials include sugar, flavorings (including chocolate), flour, nuts, and milk, which are then mixed together, cooked, and then formed using various techniques into specified product shapes. The manufacture of chocolate products requires shelling, roasting, and grinding of the cocoa beans followed by the typical sugar processing operations identified above.

g. Fats and oils subsector (SIC code 207X). The Fats and Oils subsector is separated into five segments. These include the cottonseed oil mills; soybean oil mills; vegetable oil mills, except corn, cottonseed, and soybean; animal and marine fats and oils; and shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified. Only two of the five segments are represented in the part 2 application information (i.e., animal and marine fats and oils and shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified). Typical process operations at an animal and marine fats and oils facility include cooking of inedible fats and oils from butcher shops, supermarkets, food manufacturing facilities, restaurants, and slaughterhouses, tallow and grease separation from proteinaceous solids. The solids are then ground to produce meat and bone meal. Operations at an edible oils manufacturer include refining, bleaching, hydrogenation, fractionation, emulsification, deodorization, filtration, and blending of the crude oils into edible products.

h. Beverages subsector (SIC code 208X). The Beverages subsector is separated into six segments. These include the malt beverages; malt; wines, brandy, and brandy spirits; distilled and blended liquors; bottled and canned soft drinks and carbonated waters; and flavoring extracts and flavoring syrups, not elsewhere classified segments. Four of the six segments are represented by the part 2 application with malt and wines, brandy, and brandy spirits being the two segments not represented by the part 2 application information. Process operations may include brewing, distilling, fermentation, blending, and packaging (i.e., bottling, canning, or bulk packaging).

i. Miscellaneous food preparation and kindred products subsector (SIC code 209X). The Miscellaneous Food Preparation and Kindred Products subsector is separated into seven industrial segments. These include canned and cured fish and seafood; prepared fresh or frozen fish and seafoods; roasted coffee; potato chips, corn chips, and similar snacks; manufactured ice; macaroni, spaghetti, vermicelli, and noodles; and food preparations, not elsewhere classified segments. Three of the seven segments are represented by the part 2 application information (i.e., prepared fresh or frozen fish and seafoods; potato chips, corn chips, and similar snacks; and macaroni, spaghetti, vermicelli, and noodles). Process operations may include shelling, washing, drying, shaping, baking, frying, and seasoning.

j. Tobacco products subsector (SIC code 21XX). The tobacco products subsector is separated into four segments. These include cigarettes, cigars, chewing and smoking tobacco and snuff, and tobacco stemming and redrying. None of these four segments submitted part 2 application information. Typical process operations may include drying, blending, shaping, cutting and rolling.

3. Pollutants in Storm Water Discharges Associated with Food and Kindred Products Processing Facilities

Typical food and kindred products processing facilities do not conduct many processing operations outdoors. The nature of the business, and the required sanitary conditions, require that the raw materials through final product be protected from storm water. As such, the contamination of storm water from this sector is primarily from the loading and unloading of products and raw materials, spillage and leaks from tanks and containers stored outdoors, waste management practices, pest control, and improper connections to the storm sewer. Table U–1 lists potential pollutant sources from activities that commonly take place at food and kindred products processing facilities.

TABLE U–1.—DESCRIPTION OF POTENTIAL POLLUTANT SOURCES [i, ii, iii]

Activity	Pollutant source	Pollutant(s)
A. Raw material:		
Unloading/product	• Container defects (bags, drums, bottles, crates)	BOD, TSS, O&G, pH, TKN
Loading	• Spills and leaks during unloading/ loading (tanks, rail cars). • Failed connections (hoses and couplings). • Washdown of unloading/loading area.	
B. Storage containers:		
Liquid Storage (i.e., above ground storage tanks).	• Failed piping and connections (couplings, flanges, hoses, and valves). • External corrosion and structural failure. • Spills and overflows due to operator error.	BOD, TSS, O&G, pH
Liquid Storage (drums, carboys, and gallon jugs).	• Outside containers • Open containers. • External corrosion of the containers. • Operator handling and transporting. • Spills and leaks from damaged containers.	BOD, TSS, O&G, pH
Solid Storage (silos, holding bins, fiber drums, etc.).	• Dust and particulates • Operator handling and transporting. • Spills and leaks.	BOD, TSS, O&G, pH
C. Waste management:		
Air Emissions	• Oven emissions • Vents. • Fine solids handling.	BOD, TSS, O&G, pH
Solid Waste	• Dumpsters and trash cans • Spent equipment, scraps, etc.	BOD, TSS, O&G, pH, copper, manganese
Wastewater	• Treatment processes (e.g., hydraulic overflow) • Outside piping and connections (couplings, flanges, hoses, valves, and pumps).	BOD, TSS, O&G, pH, fecal coliform
D. Pest control:		
Pesticides, Rodenticides, Insecticides.	• Outside areas of applications	Miscellaneous insecticides, rodenticides, pesticides, etc., TKN
E. Improper: Connections to the storm sewer	• Process wastewaters • Process floor drains. • Sanitary sewers. • USTs.	BOD, TSS, O&G, pH

[i] "Standard Handbook of Environmental Engineering," Corbitt, Robert A., McGraw-Hill, Inc., 1990.
[ii] Air Pollution Engineering Manual, Air and Waste Management Association, Edited by Anthony J. Buonicore and Wayne T. Davis, Van Nostrand Reinhold, New York, 1992.
[iii] "Environmental Engineering and Sanitation," Fourth Edition, Salvato, Joseph A., John Wiley & Sons, Inc., 1992.

Impacts caused by storm water discharges from food and kindred products processing facilities will vary from facility to facility. Several factors influence to what extent operations at the site can affect water quality. Such factors include: geographic location; hydrogeology; the types of industrial activities exposed to storm water; the size of the operation; the nature of storm water control measures in place; and the type, duration, and intensity of precipitation events. Each of these factors interact to influence the quantity and quality of storm water runoff. For example, flour/oil particulate emissions from vents (e.g., from baking operations) may be a significant source of pollutants at some facilities, while material storage may be a primary source at others. Similarly, a facility with all storm water from exposed industrial activity diverted to the sanitary sewer would have less of an impact than a facility not practicing this control option. In addition, sources of pollutants other than storm water, such as illicit connections, spills, and improperly dumped materials, may increase the pollutant loadings discharged in the receiving stream.

EPA reviewed Part 1 Group Storm Water Applications for facilities identified as sampling facilities to determine the types of significant materials from food and kindred products processing that are exposed to storm water. A list of these significant materials is presented in Table U–2. Note that significant materials related to vehicle maintenance (e.g., diesel fuel) and other miscellaneous nonprocessing materials (e.g., lumber) are not included in Table U–2.

TABLE U–2.—SIGNIFICANT MATERIALS EXPOSED TO STORM WATER

Acids (phosphoric, sulfuric).	Feathers
Activated carbon	Feed
Ammonia	Ferric chloride
Animal cages	Fruits, vegetables, coffee beans
Bleach	Gel bone
Blood	Grain (Flour, oats, wheat)
Bone meal	Hides
Brewing residuals	Lard
Calcium oxide	Manure
Carbon dioxide	Milk
Caustic soda	Salts (brine)
Chlorine	Skim powder
Cheese	Starch
Coke oven tar	Sugar (sweetener, honey, fructose, syrup)
Detergent	Tallow
Eggs	Wastes (off-spec product, sludge)

TABLE U–2.—SIGNIFICANT MATERIALS EXPOSED TO STORM WATER—Continued

Ethyl alcohol	Whey
Fats, greases, shortening, oils.	Yeast

EPA analyzed data for both the sector as a whole and for each of the nine subsectors reporting analytical data. While examination of the data for each subsector did not identify any significant variation across the subsectors, the limited amount of available data for some of the subsectors failed to provide for meaningful statistical comparisons. As such, except for the few exceptions noted in Section H.6. (Monitoring and Reporting Requirements), EPA aggregated the data for purposes of conducting a sector analysis. The aggregate sampling data for the food and kindred products processing sector, received by EPA as of January 1, 1993, is presented in Table U–3.

TABLE U–3.—FOOD AND KINDRED PRODUCTS SECTOR STATISTICS FOR POLLUTANTS,[i] MG/L

Pollutant	No. of samples		Mean[ii]		Minimum[ii][iii]		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[iv]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	298	287	51.2	42.5	0	0	1550	1360	13.9	11	206	180	1160	968
COD	296	286	192.5	141.7	0	0	3810	2820	77	63	745	463	2000	2040
$NO_3 + NO_2$	301	289	1.17	.98	0	0	44.9	17.7	.56	.55	3.7	3.6	12.9	9.6
TKN	300	290	4.95	4.07	0	0	78	75	2.35	2	18	17	43	32.4
O & G	300	N/A	5.4	N/A	0	N/A	93	N/A	1.1	N/A	21	N/A	43.5	N/A
Phosphorus	298	287	5.13	1.32	0	0	970	19.7	.56	.48	9.06	5.96	24.4	10.2
TSS	298	286	252	200	0	0	3300	4530	72.5	53.5	1320	900	2667	2240
Copper	17	17	.075	.046	0	0	.27	.24	.04	.03	.27	.24	.27	.24
Manganese	16	16	.23	.19	0	0	1.49	1.35	.16	.08	1.49	1.35	1.49	1.35
Iron	11	9	2.15	.45	.09	.09	18	1.9	.54	.2	18	1.9	18	1.9
Zinc	33	31	.781	.792	0	0	13.5	7.35	.21	.24	2.1	5.83	13.5	7.35

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics. Results presented as "not detected" were set at one-half the detection limit for statistical comparison purposes.

[ii] The mean is calculated using the value "zero" for all concentrations identified as below detection levels.

[iii] All parameters had at least one sample reported as below detection level (i.e., not detected (ND)).

[iv] Composite samples.

The selection of parameters for monitoring is based on the nature of operations and exposed materials at food and kindred products processing facilities, the data provided in the part 2 storm water group applications, and review of EPA's "Development Documents" for the food processing sector. In addition, effluent limitations guidelines currently in effect for process wastewaters were reviewed to identify the types of pollutants that may reasonably be expected to be present at food processing facilities. A list of these pollutants for all food processing activities regulated by effluent limitations guidelines is presented in Table U–4.

TABLE U–4.—FOOD AND KINDRED PRODUCTS PROCESSING: EFFLUENT LIMITATIONS GUIDELINES

40 CFR Part	BPT/ BCT	BAT	NSPS	PSES	PSNS
405 (Dairy)	BOD TSS pH	N/A	BOD TSS. pH.	N/A	N/A
406 (Grain Mills)	BOD TSS pH (1)	(1)	BOD TSS. pH. (1).	N/A	N/A
407 (Fruits and Vegetables)	BOD TSS O&G pH.	N/A	BOD TSS. pH.	N/A	N/A
408 (Seafood Processing)	BOD TSS O&G pH Size	N/A	BOD TSS. O&G. pH. Size.	N/A	N/A
409 (Sugar Processing)	BOD TSS Fecal Heat pH.	Heat	BOD TSS. pH. (1).	N/A	N/A
432 (Meat Products)	BOD TSS O&G Fecal pH	N/A	BOD TSS. O&G Fecal. pH Ammonia	N/A N/A	N/A N/A

[1] Provides for zero discharge of process wastewater from at least one process operation.

Below is a discussion of the part 2 data.

a. Five-day biochemical oxygen demand. Five-day biochemical oxygen demand (BOD_5) is a measure of the oxygen consuming capabilities of organic matter (i.e., aerobic decomposition) in wastewater over a 5-day period. High BOD_5 concentrations may deplete dissolved oxygen in the receiving waters which could cause anaerobic conditions in the stream, potentially killing all inhabitants of the affected area. $BOD5_5$ is generally considered to be the primary pollutant of concern for most types of food processing facilities due to the fact that food items (e.g., sugars, grains, fruits, miscellaneous food refuse) are highly biodegradable, thus exerting a high oxygen demand. BOD_5 data submitted in the part 2 storm water permit applications for the food and kindred products sector indicate the following:

- The mean concentrations for grabs and composites were approximately 51 mg/L and 43 mg/L, respectively.
- The median concentrations for grabs and composites were approximately 14 mg/L and 11 mg/L, respectively.
- The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 206 mg/L and 180 mg/L, respectively.
- The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composites were approximately 1160 mg/L and 968 mg/L, respectively.

The data submitted in the part 2 applications clearly show the wide variation in BOD_5 values within the sector. While median concentrations are consistent with concentrations for storm water from residential areas, higher concentrations of BOD_5 are apparent.

b. Total kjeldahl nitrogen, ammonia nitrogen, and nitrate plus nitrite nitrogen. Total Kjeldahl nitrogen (TKN) is a measure of the amount of ammonia nitrogen plus organic nitrogen in the water. Under septic conditions, organic nitrogen decomposes to form ammonia nitrogen. Ammonia nitrogen can add to eutrophication by supplying nitrogen through its decomposition products. Nitrates plus nitrites are produced as a result of the oxidation, via biodegradation, of ammonia nitrogen and organic nitrogen. Thus, ammonia nitrogen will consume the oxygen supply in a receiving stream. Nitrates are considered to be poisonous substances in mineralized water. Nitrates and nitrites have been found to contribute to methemoglobinemia in infants. Concentrations of over 10 mg/L of nitrates in water should not be ingested by infants.

Sources of nitrogen in storm water from food and kindred products processing facilities include: decomposing animal parts, leaking ammonia refrigeration, ammonia disinfectant, detergents, and meat processing (i.e., curing, pickling, and other processing). Kjeldahl nitrogen is a good indicator of the crude protein in the water, hence, a measure of the quantity of potentially valuable product being lost in the storm water.

TKN data submitted in the part 2 storm water permit applications for the food and kindred products sector indicate the following:

- The mean concentrations for grabs and composites were approximately 5 mg/L and 4 mg/L, respectively.
- The median concentrations for grabs and composites were approximately 2.4 mg/L and 2.0 mg/L, respectively.
- The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 18 mg/L and 17 mg/L, respectively.
- The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composites were approximately 43 mg/L and 32 mg/L, respectively.

EPA proposes monitoring requirements for TKN because of the high potential for nitrogen releases to the environment from food processing facilities. TKN is used as the indicator for nitrogen in the storm water because it is a good indicator of the crude protein content in the discharge and thus an indication to the permittee of the product being lost via the storm water.

Nitrate plus nitrite nitrogen data submitted in the part 2 storm water permit applications for the food and kindred products sector indicate the following:

- The mean concentrations for grabs and composites were approximately 1.2 mg/L and 1.0 mg/L, respectively.
- The median concentrations for grabs and composites were approximately 0.6 mg/L and 0.6 mg/L, respectively.
- The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 3.7 mg/L and 3.6 mg/L, respectively.
- The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composites were approximately 12.9 mg/L and 9.6 mg/L, respectively.

Nitrate plus nitrite nitrogen is not considered to be a pollutant of concern for food and kindred products processing facilities. The data provided in the part 2 group applications do not support continued monitoring for these pollutants.

c. Total phosphorus. Total phosphorus is comprised of both dissolved and suspended phosphorus. Phosphorus occurs in natural wastes and wastewaters almost exclusively as phosphates. Phosphorus is a nutrient for aquatic plant life and one of the leading causes of eutrophication in receiving streams. Concentrations above 25 µg/L may lead to growth of excessive algae and other nuisance plants. A concentration of 1.0 mg/L phosphorus is commonly established at wastewater treatment plants discharging to receiving streams where phosphorus poses a problem.

Phosphorus data submitted in the part 2 storm water permit applications for the food and kindred products sector indicate the following:

- The mean concentrations for grabs and composites were approximately 5.1 mg/L and 1.3 mg/L, respectively.
- The median concentrations for grabs and composites were approximately 0.56 mg/L and 0.48 mg/L, respectively.
- The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 9.1 mg/L and 6.0 mg/L, respectively.
- The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composites were approximately 24.4 mg/L and 10.2 mg/L, respectively.

The data submitted in the part 2 applications indicate a variation in phosphorus concentrations across the sector. The nature of potential pollutant sources to runoff from food and kindred processing facilities, including detergents and animal feces, can contribute high levels of phosphorus to waterways.

d. Total copper and manganese. EPA is requiring all facilities in this industry to conduct sampling for total copper and manganese. The median grab sample value for total copper is 0.04 mg/L. This is greater than the benchmark level from the "Gold Book: Acute Aquatic Life Freshwater Criteria." The median grab sample for manganese is 0.160 mg/L as compared to a level of concern of 0.05 mg/L as found in the "Gold Book: Human Health Criteria for Consumption of Water Organisms." Because both of the individual values are greater than their corresponding benchmark levels, EPA is requiring all facilities to conduct sampling for these pollutants.

4. Notice of Termination.

The permittee shall notify the permitting authority when discharges authorized under this section of today's proposed permit have permanently ceased or where the operator of storm water discharges associated with industrial activity at a facility changes. Termination of coverage under this section of today's proposed permit will only be granted when all storm water discharges from material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery that are exposed to storm water are eliminated.

5. Options for Controlling Pollutants

One option for controlling pollutants in storm water is to set effluent limitations for these discharges. EPA does not consider this to be feasible because of the lack of performance data necessary to develop limitations.

Pursuant to 40 CFR 122.44(k), permits may contain Best Management Practices (BMPs) to control or abate the discharge of pollutants in storm water, when applicable (and where numeric effluent limitations are infeasible). EPA believes that the most effective BMPs for reducing pollutants in storm water discharges from food and kindred products processing facilities is through exposure minimization and good housekeeping practices. Exposure minimization practices reduce the potential for storm water to come in contact with pollutants. Good housekeeping practices ensure that the facility is responsive to routine and non-routine activities that may increase exposure of pollutants to storm water. The BMPs necessary to address these two concerns are generally uncomplicated and inexpensive practices. They are easy to implement, and require little or no maintenance. Minor capital expenses, such as construction of cement pads or berms/dikes, may be necessary in some cases, although these types of control structures already exist at many food and kindred products processing facilities. In a few instances, more intensive BMPs, such as detention ponds or filtering devices, may be necessary depending on the type of discharge, types and concentrations of contaminants, and volume of flow, although these occurrences are expected to be very low for the sector as a whole. The types of material management practices identified in the storm water group applications for the food and kindred products processing sector, for sampling facilities only, are identified in Table U–5. In fact, part 1 group application data indicate that BMPs are widely implemented at food and kindred products processing facilities.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrogeology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of

contaminated storm water will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with food and kindred products processing facilities.

Table U–6.1 identifies general BMPs that are applicable to a variety of food and kindred products processing subsectors, while Table U–6.2 identifies BMPs for specific processing operations.

6. Storm Water Pollution Prevention Plan Requirements

All facilities included in this section of today's proposed permit must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of food and kindred products processing facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provides a flexible framework for the development and implementation of site-specific controls to minimize pollution in storm water discharges. This approach is consistent with the approach used in the baseline general permits finalized on September 9, 1992 (57 FR 41236).

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from food and kindred products processing facilities. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as: Facility size; climate; geographic location; hydrogeology; the environmental setting of each facility; and volume and type of discharge generated. This flexibility is necessary because each facility will be unique in that the source, type and volume of contaminated surface water discharges will differ from site to site.

There are two major objectives to a pollution prevention plan: (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility, and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

TABLE U–5.—MATERIAL MANAGEMENT PRACTICES [i,ii]

Absorbent mats	Preventative maintenance
Baghouse	Retaining wall
BMPs	Roof drains
Catch basin	Sealed tanks
Concrete pad	Shoveling
Containment	Site inspection
Cover (drums, holding pen, loading, storage)	Spill prevention plan
Curbing	Spillstoppers
Diking	Stone filters
Diversion	Sumps
Drains	Swales
Dust control	Sweeping
Housekeeping	Tarps (i.e., temporary covers)
Indoor storage	Training
Infiltration	V-Strips
Mopping	Vacuuming
Oil interceptor	Valves
Oil/water separators	Vinyl socks
Overfill protection	Waste minimization procedures
Ponds	Wetland

[i] NPDES Storm Water Group Applications—Part 2. Application Nos. 12, 13, 37, 81, 125, 159, 178, 179, 312, 436, 437, 446, 541, 557, 583, 584, 599, 630, 730, 789, 811, 819, 935, 936, 1006, 1096, 1147, and 1159.

[ii] NPDES Storm Water Group Applications—Part 1. Application Nos. 12, 13, 37, 60, 81, 125, 144, 159, 178, 179, 312, 436, 437, 446, 533, 541, 545, 557, 583, 584, 599, 630, 680, 730, 733, 789, 811, 819, 932, 935, 936, 1006, 1096, 1147, 1159, and 1217.

Specific requirements for a pollution prevention plan for food and kindred products processing facilities are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

a. Contents of the plan. Storm water pollution prevention plans are intended to aid operators of food and kindred products processing facilities to evaluate all potential pollution prevention sources at a site, and assist in the selection and implementation of appropriate measures designed to prevent, or control, the discharge of pollutants in storm water runoff. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, 1992 (EPA 832–R–92–006), to assist permittees in developing and implementing pollution prevention measures.

(1) Pollution prevention team. As a first step in the process of developing and implementing a storm water pollution prevention plan, permittees must identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual of group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited storm water pollution potential).

(2) Description of potential pollutant sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows. This assessment of storm water pollution prevention will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Plans must describe the following elements:

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR [i, ii, iii, iv]

Activity	BMPs
A. Raw material unloading/product loading:	• Ensure that a facility representative is present during unloading/loading activities.
Shipping and Receiving.	• Inspect the unloading/loading areas to detect problems before they occur. • Close storm drains during loading/unloading activities in surrounding area. • Inspect all containers prior to unloading/loading of any raw or spent materials. • Install backflow prevention devices on liquid transfer equipment.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR i, ii, iii, iv—Continued

Activity	BMPs
	• Inspect all connection equipment (e.g., hoses and couplings), and replace when necessary, before performing unloading/loading activities. • Perform all unloading/loading activities in a covered and/or enclosed area. • Use drip pans when loading/unloading liquid product. • Situate loading/unloading areas indoors or in a covered area. • Use rubber seals in truck loading dock areas to contain spills indoors. • Drain hoses back into truck, railcar, etc. after loading/unloading materials. • Install high level alarm on tanks to prevent overfilling. • Ensure that berms and dikes are built around the unloading/loading areas, if applicable. • If outside or in covered areas, minimize runon of storm water into the unloading/loading areas by grading the areas to ensure that storm water runs off. • Use dry cleanup methods for unloading/loading areas rather than washing the areas down. • Train employees on proper unloading/loading techniques. • Initiate an inventory control for all raw and spent materials.
B. Storage containers: Liquid storage	• Inspect the external condition (corrosion, leaks) of the containers.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR i, ii, iii, iv—Continued

Activity	BMPs
	• Inspect the general area around the containers. • Ensure that beams and dikes are built around the containers. • Cover and/or enclose. • Bulkhead liquid storage tanks indoors (i.e., tank outlets located inside buildings).
Liquid storage (drums, carboys, and gallon jugs).	• Ensure that all containers are closed (e.g., valves shut, lids and manways sealed, caps closed). • Wash containers indoors before storing empty containers outdoors. • If outside or in a covered area, minimize runon of storm water into a storage area by grading area to ensure that storm water runs "off" and not "on". • Train employees on proper storage techniques (e.g., filling and transferring contents). • Maintain employee training on proper handling and transportation of materials. • Maintain an inventory control of all raw and spent materials. • Employ measures to protect against spillage from the overflows (e.g., high level sensors, alarms).
Solid storage (silos, holding bins, fiber drums, etc.).	• Consider vacuum emission control systems for airborne dust and particulate matter.
C.Waste management: Wastewater	• Perform treatment processes in-house, if possible.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR i, ii, iii, iv—Continued

Activity	BMPs
	• Inspect the outside pipe connections (couplings, valve seals and gaskets, flanges, etc.) of the treatment system for leaks, corrosion, and poor maintenance upkeep.
Solid waste (paper, wood pellets, scrap metals, refuse, etc.).	• Inspect the general area around the solid waste (e.g., look for signs of leaching). • Store waste so that it is physically contained (dumpsters, drums, bags). • Store waste in an enclosed/covered area. • If outside or in a covered area, minimize exposure to storm water by grading the area to ensure that storm water runs "off" and not "on". • Ensure hazardous waste disposal practices are performed in accordance with Federal, State, and local requirements. • Route trash compactor leakage to treatment system or sanitary sewer.
Air emissions	• Clean around vents and stacks to atmosphere from process and storage areas. • Place tubs around vents and stacks for easy collection of settling particles. • Inspect air emission control systems (e.g., baghouses) regularly and repair and replace as necessary. • Route overflows/condensates from process vents to onsite treatment system or to the sanitary sewer.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR [i, ii, iii, iv]—Continued

Activity	BMPs
D. Pest control:	• Follow manufacturers directions for application of pest control materials to site. • Time application for dry weather conditions. • Store partially full containers indoors or undercover. • Apply insecticides during breeding months. • Protect rat bait houses from storm water.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR [i, ii, iii, iv]—Continued

Activity	BMPs
E. Improper connections to the storm sewer:	• Perform smoke or dye testing to determine if interconnections exist between the sanitary and storm sewers. • Plug all floor drains leading to storm sewers. • Update facility schematics to accurately reflect all plumbing connections.
F. General	• Offer employee incentives so that employees will develop cost effective, worker efficient BMPs. • Request outside firm to conduct a storm water inspection/audit.

TABLE U–6.1.—GENERAL STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR [i, ii, iii, iv]—Continued

Activity	BMPs
	• Inspect material transfer lines/connections for leaks or signs of wear and repair or replace as necessary.

[i] "Standard Handbook of Environmental Engineering," Corbitt, Robert A., McGraw-Hill, Inc., 1990.

[ii] Air Pollution Engineering Manual, Air and Waste Management Association, Edited by Anthony J. Buonicore and Wayne T. Davis, Van Nostrand Reinhold, New York, 1992.

[iii] "Environmental Engineering and Sanitation," Fourth Edition, Salvato, Joseph A., John Wiley & Sons, Inc., 1992.

[iv] Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA 832–R–92–006), EPA, Office of Water, September 1992.

TABLE U–6.2.—SPECIFIC STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR [i, ii, iii, iv]

Activity	BMPs
A. Meat Products:	
• Animal holding pens (beef, chicken)	• Inspect area around animal holding pens. • Enclose/cover fowl hanging area. • Enclose/cover the animal holding pens. • Grade the areas around the animal holding pens to ensure storm water "runs off" and not "on" to the holding pen. • Train employees on proper material (i.e., hide, hair, feathers, animal parts) clean-up procedures around and within the animal holding pens. • Store animal manure and other materials from clean-up activities in appropriate containers in an enclosed/covered area. • Area for trailers holding empty bird cages should have storm water runon/runoff controls in place. • Use mechanical sweepers around site to clean up fugitive feathers, dust, and manure.
B. Dairy Products:	
• Packaged dairy products (spoiled and broken product containers).	• Inspect area around aged/spoiled dairy products. • Store aged/spoiled dairy products in enclosed area. • Train employees on proper disposal methods for all aged/spoiled dairy products. • Ensure that all aged/spoiled product (e.g., bottles, cartons, plastic containers) are disposed of in a proper manner (bagged, covered).
C. Canned Frozen and Preserved Fruits, Vegetables, and Frozen Specialties:	
• Fruit and vegetable storage and disposal	• Inspect all fruit and vegetable storage areas. • Store all fruits and vegetables in appropriate containers (e.g., bins, bushels, baskets, buckets) and in enclosed/covered areas. • Store empty fruit and vegetable containers in an enclosed/covered area. • Train employees on proper handling/disposal methods for fresh/rotten fruits and vegetables. • Consider air emission control systems for all cooking processes to reduce particulate matter. • Minimize fruit and vegetable storage time outdoors.
D. Grain Mills:	
• Grain handling, storage and mixing	• Inspect the general area around the grain storage. • Store all grain in appropriate containers (e.g., silos, hoppers) in an enclosed/covered area. • Train employees on grain handling procedures. • Consider a vacuum control system in all grain mixing areas.
E. Bakery Products:	
• Ingredient storage and mixing	• Inspect ingredient storage areas. • Store all ingredients (e.g., corn sweeteners, flour, shortening, syrup, vegetable oils) in appropriate containers (e.g., tanks, drums, bags) in an enclosed/covered area.
• Baking process	• Remove flour/oil dust accumulation around ventilation exhaust systems.

TABLE U–6.2.—SPECIFIC STORM WATER BMPS FOR THE FOOD AND KINDRED PRODUCTS PROCESSING SECTOR[i, ii, iii, iv]—Continued

Activity	BMPs
F. Sugar and Confectionery:	• Install an air emission control system for all baking processes to reduce particulate matter.
• Sugar handling.	• Consider a vacuum control system in all granular and powdered processing areas.
G. Fats & Oils:	
• Fats and oils storage and disposal	• Inspect all fats and oils storage areas. • Store all fats and oils, (e.g., butcher shop materials, hair, hide, tallow, bone meal, and offal) in enclosed/covered areas. • Ensure all fats and oils are physically contained.
H. Beverages:	
• Material storage and mixing	• Ensure grain is stored in enclosed/covered area. • Consider an air emission control system for all grain handling and brewing processes. • Protect reusable beverage containers that are stored outdoors from storm water contact.

[i] "Standard Handbook of Environmental Engineering," Corbitt, Robert A., McGraw-Hill, Inc., 1990.
[ii] Air Pollution Engineering Manual, Air and Waste Management Association, Edited by Anthony J. Buonicore and Wayne T. Davis, Van Nostrand Reinhold, New York, 1992.
[iii] "Environmental Engineering and Sanitation," Fourth Edition, Salvato, Joseph A., John Wiley & Sons, Inc., 1992.
[iv] Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA 832–R–92–006), EPA, Office of Water, September 1992.

(a) Drainage—The plan must contain a map of the site that shows the pattern of storm water drainage, structural and nonstructural features that control pollutants in storm water runoff, and process wastewater discharges, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this section of today's proposed permit. The map must also show areas where the following general activities take place: loading/unloading areas; vehicle fueling; vehicle and equipment maintenance and/or cleaning areas; waste treatment, storage, and disposal locations; and liquid storage tanks. In addition, as identified in the Part 1 Storm Water Group Applications, the following areas are also potential sources of pollutants in storm water from food and kindred products processing facilities: vents and stacks from cooking and drying operations and dry product vacuum transfer lines; animal holding pens; spoiled product and broken product container storage areas; and significant dust or particulate generating areas. In addition, the site map must identify all monitoring locations that must be sampled as part of the monitoring requirements identified in Section H.5. (Monitoring and Reporting Requirements). This will allow for a direct comparison of the industrial activities exposed to storm water with the analytical data for storm water discharges from these areas.

(b) Inventory of exposed materials—Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the effective date of the permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment that the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(c) Significant spills and leaks—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

(d) Non-storm water discharges—Each pollution prevention plan must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water discharges. The certification must describe possible significant sources of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Pollution prevention plans must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water discharge.

(e) Sampling data—Any existing data on the quality or quantity of storm water discharges from the facility must be described in the plan. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map. Also, the plan should identify the types of storm water discharges (i.e., applicable sectors) being sampled at each outfall.

(f) Summary of potential pollutant sources—The description of potential pollutant sources culminates in a narrative assessment of the risk potential that the industrial activities, materials, and physical features of the site pose to storm water quality. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the

following activities: loading/unloading areas; vehicle fueling; vehicle and equipment maintenance and/or cleaning areas; waste treatment, storage, and disposal locations; liquid storage tanks; vents and stacks from cooking and drying operations and dry product vacuum transfer lines; animal holding pens; out-of-date/spoiled product storage areas; and significant dust or particulate generating areas. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (e.g., biochemical oxygen demand, oil and grease, etc.) associated with each source.

In addition to food and kindred products processing related industrial activities, the plan must also describe application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides, etc.) used at the facility, including a discussion of application and storage procedures.

(3) Measures and controls. The permittee must evaluate, select, and describe the pollution prevention measures, BMPs, and other controls that will be implemented at the facility. EPA emphasizes the implementation of pollution prevention measures and BMPs that reduce possible pollutant discharges at the source. Source reduction measures include, among others, preventative maintenance, chemical substitution, spill prevention, good housekeeping, training, and proper materials management. Where source reduction is not appropriate, EPA supports the use of source control measures and BMPs such as material segregation or covering, water diversion, and dust control. If source reduction or source control are not possible, recycling or treatment are the remaining alternatives. Recycling allows the reuse of storm water while treatment lowers pollutant concentrations prior to discharge. Since the majority of food and kindred products processing is conducted indoors, the activities identified above are geared towards only those activities that may contribute pollutants to storm water. Also because of the relatively few activities that are conducted outdoors within this sector, pollution prevention measures, BMPs, and other controls should be relatively few and easy for any given permittee. Also, these measures are the most appropriate means to reduce pollutant loadings to storm water (as opposed to pollutant limitations) because of the relative ease and the significant reductions in pollutant loads that can be realized. The permittee should consider the general storm water BMPs for the food and kindred products processing sector identified in Table U–6.1 and the subsector specific BMPs provided in Table U–6.2 when assessing the need for storm water measures and controls.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each of the potential pollutant sources will be addressed. The plan must also identify the times during which each control or practice will be implemented. Also, the plan should summarize the effects that the controls or practices will have on storm water discharges from the site. At a minimum, the measures and controls must address the following components:

(a) Good housekeeping—Permittees must describe protocols established to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. Specifics of this plan must be communicated to appropriate plant personnel.

(b) Preventative maintenance—Permittees are required to develop a preventative maintenance program that includes regular inspections and maintenance of storm water BMPs. The purpose of the inspections is to assess the effectiveness of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist should be considered. A checklist ensures that all required areas are inspected, as well as providing documentation for the recordkeeping requirement.

(c) Spill prevention and response procedures—Permittees are required to identify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and in the event of a spill enable proper and timely response. Areas and activities that typically pose a high risk for spills at food and kindred products processing facilities include raw material unloading and product loading areas, material storage areas, and waste management areas (e.g., dumpsters, compactors). These activities and areas, and their accompanying drainage points, must be described in the plan.

(d) Inspections—In addition to, or as part of, the comprehensive site evaluation required under XI.U.6.b. (Comprehensive Site Compliance Evaluation) of this section of today's proposed permit, qualified personnel must inspect designated equipment and areas of the facility at appropriate intervals as specified in the plan. Areas that are found to possibly contribute pollutants to storm water are identified in this section of today's proposed permit as requisite areas for periodic scheduled inspections. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained. Inspections shall be carried out by qualified facility personnel at least once each year.

(e) Employee training—Permittees must describe a program for informing personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as good housekeeping, materials management, and spill response procedures. A schedule for conducting this training must be provided in the plan. Where appropriate, contractor personnel also must be trained in relevant aspects of storm water pollution prevention.

(f) Recordkeeping and internal reporting procedures—Permittees must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be reported and the date of their corrective action noted.

(g) Sediment and erosion control—Permittees must identify areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. Measures to limit erosion in these areas must be identified.

(h) Management of runoff—Permittees must provide a narrative assessment of traditional storm water management practices that divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce the discharge of pollutants. Based on the assessment, the permittee must identify practices that are reasonable and appropriate for the facility and must describe the particular pollutant source area or activity to be controlled by each storm water management practice. Reasonable and appropriate practices must be implemented and maintained.

b. Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of this section of

today's proposed permit. Comprehensive site compliance evaluations must be conducted at least annually for food and kindred products processing facilities. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that food and kindred products facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires food and kindred products facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table U–7. The pollutants listed in Table U–7 were found to be above benchmark levels for a significant portion of food and kindred products facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at benchmark levels from food and kindred products facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from food and kindred product facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table U–7, and applicable to that industrial sector. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE U–7.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Five-day Biochemical Oxygen Demand (BOD)[1]	9.0
Ammonia	0.093
Total Kjeldahl Nitrogen (TKN)	1.5
Total Phosphorus	0.33
Total Recoverable Copper	0.009
Total Recoverable Manganese	0.05
Total Recoverable Iron	0.3
Total Recoverable Zinc	0.065

If the average concentration for a parameter is less than or equal to the value listed in Table U–7, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table U–7, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE U–8.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table U–8, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table U–8, then no further sampling is required for that parameter.
4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table U–8. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

g. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils. These notices specifically require that facilities with storm water discharges that are associated with meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils are required to monitor their storm water discharges for $BOD^{(5)}$, oil and grease, COD, total suspended solids, total Kjeldahl nitrogen, total phosphorus, pH, and fecal coliform. Today's proposed permit contains monitoring requirements for $BOD^{(5)}$, total Kjeldahl nitrogen, total phosphorus, total copper, manganese, ammonia, total iron, and total zinc. EPA requests comment upon the difference between the monitoring requirements set out for meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils facilities in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

In addition, EPA requests comment upon the following monitoring and reporting requirements in lieu of those in Part XI.U.6. of today's proposed permit.

a. Annual monitoring requirements. Beginning on the effective date and lasting through the expiration date of this permit, all food and kindred products processing facilities regulated under this section must monitor storm water discharges annually (1 time per year) except as provided in VI.A. (Sampling Waiver and Representative Discharge) of the baseline general permit, for each outfall discharging storm water meeting the conditions of section XI.U.1. (Eligibility) of this

section. Permittees must monitor for the following storm water pollutants:

TABLE U–9.—MONITORING REQUIREMENTS

Parameter	Units	Frequency	Sample type
Total Flow	MGD	1/year	estimate.
BOD_5	mg/L	do	grab.
TSS	mg/L	do	Do.
Oil and Grease	mg/L	do	Do.
Total Kjeldahl Nitrogen[1]	mg/L	do	Do.
Total Phosphorus[1, 2]	mg/L	do	Do.
Fecal Coliform[1]	col/ml	do	Do.
pH	s.u	do	Do.

[1] Applicable to facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.

[2] Applicable to facilities in SIC Codes 204 (i.e., grain mills) and other facilities that store, use, or manage chemicals containing phosphorus (excluding phosphoric acid) exposed to storm water.

In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total flows (in gallons) of the discharge sampled;

b. Sample type. For all discharges, data shall be reported for one grab sample only. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall retain with the monitoring results a description of why a grab sample during the first 30 minutes was impracticable. If the storm water from such operation flows such that there are numerous small points of discharge, one sample may be collected to represent the adjacent flows.

c. Quarterly visual examination of storm water quality. Facilities shall perform and document a visual examination of storm water quality of each storm water discharge associated with industrial activity exposed to storm water. The inspection must be of a grab sample collected from each storm water outfall. The examination must be made at least once in each designated period (described in XI.U.8.c.(1) below) during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February: March to May; June to August; and September to November.

(2) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. One of the four quarterly samples must be used for the annual monitoring requirements specified in Part XI.U.8.a. above. No analytical tests are required to be performed on the remaining three samples. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(3) Information must be maintained onsite and include: the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

(4) Based on the results of the quarterly visual inspection, the description of potential pollutant sources and pollution prevention measures and controls identified in the pollution prevention plan shall be revised as appropriate within 2 weeks of such inspection and shall provide implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

d. Retention of records—(1) The permittee shall retain the pollution prevention plan developed in accordance with Parts VI. and XI.U.3. (Storm Water Pollution Prevention Plans) of this permit until at least 1 year after coverage under this permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, until at least 3 years after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit (see paragraph XI.U.8.d.(2) (below) of this permit) or extended by request of the Director at any time.

(2) Permittees must submit monitoring results as required in Part VI.A. (Monitoring Requirements) to the Director upon the request of the Director.

V. Storm Water Discharges Associated With Industrial Activity From Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities

1. Discharges Covered Under this Section

Special permit conditions have been developed for textile mills, apparel, and other fabric product manufacturing facilities. The conditions proposed in this section apply to storm water discharges from textile related operations located on any of the facilities covered under the storm water application regulations [40 Code of Federal Regulations (CFR) 122.26] and applying for coverage under this section.

The storm water application regulations define storm water discharges associated with industrial activity at 40 CFR 122.26(b)(14).

Category (xi) of this definition includes facilities under Standard Industrial Classifications 22 and 23. The conditions proposed in this section apply to storm water discharges from the following activities under major industrial groups 22 and 23: Textile Mill Products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel; the integrated manufacturing of knit apparel and other finished articles of yarn; the manufacturing of felt goods (wool), lace goods, nonwoven fabrics, miscellaneous textiles, and other apparel products.

Facilities in Major Group 22 typically receive and prepare fibers, transform these materials into fabric or related products, and finish the materials before packaging. Facilities in Major Group 23 typically receive woven or knitted fabric for cutting, sewing, and packaging. For more information on the industrial activities at textile facilities, consult EPA's "Development Document for Effluent Limitations Guidelines and Standards for the Textile Mills" (Document EPA 440/1–79/0226, October 1979).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

Pollutants in Storm Water Discharges Associated with the Manufacture of Textile Products

The Agency has conducted a careful examination of the data submitted by the group, including a review of supplementary information regarding the textile industry. Based on a review of this information, the following pollutants and/or pollutant parameters may be present in storm water discharges associated with textile products manufacturing:

- *Conventional Pollutants*—Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), pH
- *Toxic Pollutants*—Total chromium, total aluminum, total copper, total lead, total zinc
- *Nonconventional Pollutants*—Chemical Oxygen Demand (COD), phenols, sulfides.

Based on group application information and data, and the "Development Document for Effluent Limitation Guidelines and Standards for the Textile Mills," EPA has identified the storm water pollutants and sources resulting from textile manufacturers in Table V–1.

TABLE V–1

Activity	Pollutant source	Pollutant
Raw material storage and handling	wool, cotton, synthetics, rayon, other fibers, coal/wood piles, fuels, oil, lubricants	TSS, pH, oil and grease, COD, BOD_5, lead, chromium, benzene.
Storage and handling of materials for dyeing	Dyes, dye preservatives, pigments	Copper, phenols, lead, chromium, zinc, aluminum, acids.
Storage and handling of materials for scouring and cleaning	wool, scouring agents, detergents	BOD_5, COD, TSS, oil and grease, sulfides, phenols, pH, chromium.
Storage and handling of materials for bleaching, printing, finishing, and other activities	Dyes, bleaches, detergents, finishing agents, printing products	BOD_5, COD, TSS, oil and grease, sulfides, phenols, pH, chromium, hydrogen peroxide, acids.

Table V–2 indicates the sampling data results for part 2 conventional pollutant data submitted to EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of data submittals for each of the conventional pollutants. As Table V–2 indicates, large variations in the minimum and maximum values were often found for each of the eight conventional pollutants monitored. For example:

- Composite samples of TSS ranged from 0 mg/L to 1,675 mg/L
- Grab samples of COD ranged from 0 mg/L to 306 mg/L
- Oil and grease values ranged from 0 mg/L to 42 mg/L.

TABLE V–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER,[i]
[mg/L, except as noted]

Pollutant	# of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample Type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	110	107	11.4	9.8	0.0	0.0	50.0	50.2	7.8	7.0	38.0	29.0	44.0	41.4
COD	110	107	69.2	48.1	0.0	0.0	306.0	212.0	44.0	37.0	228.0	111.0	287.0	174.3
Nitrate+Nitrite Nitrogen	110	107	1.3	1.1	0.0	0.0	71.0	65.0	0.4	0.4	2.5	1.9	5.5	3.1
Total Kjeldahl Nitrogen	106	103	2.7	1.9	0.0	0.0	44.8	10.3	1.7	1.5	6.5	5.4	25.1	9.6
Oil and Grease	111	N/A	2.9	N/A	0.0	N/A	42.0	N/A	0.0	N/A	14.0	N/A	34.0	N/A
pH (s.u.)	105	N/A	N/A	N/A	3.8	N/A	10.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	109	106	0.4	0.3	0.0	0.0	11.0	11.0	0.1	0.1	0.7	0.6	6.7	2.6
Total Suspended Solids	110	107	126	80	0	0	1888	1675	36	22	410	380	1860	683

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

Options for Controlling Pollutants

Table V–3 lists some BMPs which may be effective in limiting the amount of pollutants in storm water discharges from textile facilities. Many of the BMPs suggested focus on the process aspect of textile manufacturing. Although processes are typically conducted indoors, EPA believes that changes in the manufacturing process, such as a switch to less toxic chemicals, can lessen the amount of contamination in storm water discharges. The BMPs listed are not necessarily required to be implemented. Rather, BMPs should be chosen based on the specific nature of the storm water discharges at each textile facility and implemented as appropriate. Based on part 1 information, several of the BMPs suggested are already in place at many of the facilities. Part 1 submittals indicate that diking or other types of diversion occur at 55 percent of the sampling facilities. Nineteen percent of the sampling facilities noted that they use some form of covering as a BMP, and catch basins are in place at 45 percent. In addition, 64 percent of the facilities designated as samplers in part 1 information reported they had a Spill Prevention Control and Countermeasure Plan in place, while 56 percent used swales, 29 percent had vegetation strips, and 12 percent utilized ponds to collect storm water.

TABLE V–3

Activity	BMPs
Preparation (e.g., Desizing and Scouring)	Waste stream reuse for typical bleach unit processing; recycle J-box or kier drain wastes to saturator.
	Make use of countercurrent washing.
	Use washer waste from scour operation for batch scouring.
Dyeing	Perform analysis of spent dye baths for residual materials.
	Where feasible, obtain background information and data necessary before making product substitutions. This includes OSHA form 20 data and technical data.
	Be aware of potential problem chemicals, such as aryl phenol ethoxylates, chlorinated aromatics, chlorinated aromatics, and metals.
	Employ pad batch dyeing to eliminate the need for salts and chemical specialties from the dyebath, with associated reduction in cost and pollution source reduction.
Finishing	Reuse residual portions of finish mixes as much as possible by adding back to them the required components to make up the next mix.
	Return noncontact cooling water and stream condensates to either a hot water holding tank or a clear well. If neither is available, segregate waste streams from sources which do not generally require treatment from other waste streams that do require treatment.
General Water Conservation Techniques	Use "low liquor ratio" dyeing machines where practicable.
	Use of foam processing (mercerizing, bleaching, dyeing, finishing) where practicable as a water conservation process.
Chemical Screening and Inventory Control	Employ prescreening practices to evaluate and consider chemicals on a wide range of environmental and health impact criteria.
	Develop and perform a routine raw material quality control program.
	Review and develop procedures for source reduction of metals.
	Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
	Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets.
	Plug floor drains that are connected to the storm or sanitary sewer; if necessary, install a sump that is pumped regularly.
	Inspect the maintenance area regularly for proper implementation of control measures.
	Train employees on proper waste control and disposal procedures.
Material Handling: Bulk Liquid Storage and Containment	Store permanent tanks in a paved area surrounded by a dike system which provides sufficient containment for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.
	Maintain good integrity of all storage tanks.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Inspect piping systems (pipes, pumps, flanges, couplings, hoses, valves) for failures or leaks.
	Train employees on proper filling and transfer procedures.
Material Handling: Containerized Material Storage	Store containerized materials (fuels, paints, solvents, etc.) in a protected, secure location and away from drains.
	Store reactive, ignitable, or flammable liquids in compliance with the local fire code.
	Label all materials clearly.
	Identify potentially hazardous materials, their characteristics, and use.
	Control excessive purchasing, storage, and handling of potentially hazardous materials.
	Keep records to identify quantity, receipt date, service life, users, and disposal routes.
	Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials.
	Educate personnel for proper storage, use, cleanup, and disposal of materials.

TABLE V–3—Continued

Activity	BMPs
Material handling: designated material mixing areas	Provide sufficient containment for outdoor storage areas for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank. Use temporary containment where required by portable drip pans. Use spill troughs for drums with taps. Mix solvents in designated areas away from drains, ditches, and surface waters. If spills occur: • Stop the source of the spill immediately. • Contain the liquid until cleanup is complete. • Deploy oil containment booms if the spill may reach the water. • Cover the spill with absorbent material. • Keep the area well ventilated. • Dispose of cleanup materials properly. • Do not use emulsifier or dispersant.

Sources: Smith, Brent, "Identification and Reduction of Pollution Sources in Textile Wet Processing." Department of Textile Chemistry, North Carolina State University, Raleigh, NC, 1986.
Smith, Brent, "Identification and Reduction of Toxic Pollutants in Textile Mill Effluent." Department of Textile Chemistry, North Carolina State University, Raleigh, NC, 1992.
NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.

4. Special Conditions

There are no additional requirements beyond those described in Part VI.B of this fact sheet.

5. Storm Water Pollution Prevention Plan Requirements

The permit conditions that apply to storm water discharges from textile mills, apparel and other fabric product manufacturing facilities are, in part, established upon the basic requirements in the baseline general permit for storm water discharges from industrial activities, finalized on September 9, 1992 (57 FR 41236). The following discussion addresses only those conditions that may differ from conditions required in the baseline permit.

a. Contents of the plan—(1) Description of potential pollutant sources. Under the description of potential pollutant sources in the storm water pollution prevention plan requirements, permittees are required to include processing areas, loading/unloading areas, treatment, storage, and waste disposal areas, liquid storage tanks, fueling areas, on a site facility map. EPA believes that this is appropriate since these areas may potentially be a significant source of pollutants to storm water.

(2) Measures and controls. Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

(a) Material storage areas—All stored and containerized materials (fuels, petroleum products, solvents, dyes, etc.) must be stored in a protected area, away from drains and clearly labeled. The plan must describe measures that prevent or minimize contamination of storm water runoff from such storage areas. The facility should specify which materials are stored indoors and must provide a description of the contaminant area or enclosure for those materials which are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the appropriated containment measures in place to prevent leaks and spills. The facility may consider an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous substances. In the case of storage of empty chemical drums and containers, facilities should employ such practices as triple-rinsing containers. The discharge waters from such washings must be collected, contained, or treated, and facilities should identify where the discharge will be released.

(b) Material handling area—The plan must describe measures that prevent or minimize contamination of the storm water runoff from materials handling operations and areas. The facility may consider the use of spill and overflow protection; covering fuel areas; covering and enclosing areas where the transfer of materials may occur. Where applicable, the plan must address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals, dyes, or wastewater.

(c) Fueling areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The facility may consider covering the fueling area, using spill and overflow protection, minimizing runon of storm water to the fueling area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling.

(d) Above ground storage tank areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from above ground storage tank areas. The facility must consider storage tanks and their associated piping and valves. The facility may consider: regular cleanup of these areas, preparation of a spill prevention control and countermeasure program, providing spill and overflow protection, minimizing runon of storm water from adjacent facilities and properties, restricting access to the area, inserting filters in adjacent catch basins, providing absorbent booms in unbermed fueling areas, using dry cleanup methods, permanently sealing drains within critical areas that may discharge to a storm drain.

(3) Comprehensive site compliance evaluation. EPA believes that the incorporation of management practices such as those suggested will substantially reduce the potential for these activities and areas to significantly contribute pollutants to storm water discharges. In addition, EPA believes that these requirements continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities. Further, many facilities will find that management

measures that have already been incorporated into the facility's operation, such as the installation of overfill protection equipment and labelling and maintenance of used oil storage units, are already required under existing EPA programs and will meet the requirements of this section.

Under the preventive maintenance requirements, the plan specifically includes the routine inspection of sediment traps to ensure that solids will be intercepted and retained prior to entering the storm drainage system. Because of the nature of operations which occur at textile facilities, specific routine attention needs to be placed on the collection of solids.

Under the inspection requirements this section requires that, in addition to the comprehensive site evaluation required under Part IV of today's proposed permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility, at a minimum, on a monthly basis.

The purpose of the inspections is to check on the implementation and effectiveness of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist is highly encouraged. The checklist will ensure that all required areas are inspected, as well as help to meet the record keeping requirements.

The permittee is required to identify at least 6-month interval (twice per year) dates for employee training. Employee training must, at a minimum, address the following areas when applicable to a facility: Use of reused/recycled waters; solvents management; proper disposal of dyes; proper disposal of petroleum products and spent lubricants; spill prevention and control; fueling procedures; general good housekeeping practices. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. Copies of BMPs and any specific management plans, including emergency phone numbers, shall be posted in the work areas. EPA, therefore, is proposing to require that employee training take place at least twice a year to serve as: (1) Training for new employees; (2) a refresher course for existing employees; and (3) training for all employees on any storm water pollution prevention techniques recently incorporated into the plan.

6. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities covered by this section of today's permit. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at textile manufacturing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for textile mills, apparel, and other fabric product manufacturing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

7. Alternative monitoring requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.V.5. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the

expiration date of this permit, permittees must monitor the storm water discharges identified below at least annually (1 time per year). In addition to the parameters listed in Table V–4 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE V–4.—STORM WATER MONITORING PARAMETERS

Parameter	Unit	Frequency	Sample type[1]
Total Flow	gallons	1/year	estimate.
Biochemical Oxygen Demand (BOD_5)	mg/L	do	grab.
Oil & Grease	mg/L	do	Do.
Chemical Oxygen Demand (COD)	mg/L	do	Do.
Total Suspended Solids (TSS)	mg/L	do	Do.
pH	standard	do	Do.
Total Recoverable Aluminum	mg/L	do	Do.
Total Recoverable Copper	mg/L	do	Do.
Total Recoverable Zinc	mg/L	do	Do.
Total Recoverable Chromium	mg/L	do	Do.
Total Recoverable Lead	mg/L	do	Do.
Sulfide	mg/L	do	Do.
Phenols	mg/L	do	Do.
Acute whole effluent toxicity[2]	mg/L	do	Do.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.
[2] The acute whole effluent toxicity shall be performed in accordance with Part XI.V.5.d. of this section.

b. Semiannual and reporting requirements. During the period beginning on the effective date of this permit, textile facilities with activities identified in either Tables V–5 and V–6 must monitor those storm water discharges identified below at least semiannually (2 times per year). Permittees with textile facilities engaging in activities identified in Tables V–5 and V–6 below shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sample runoff; the duration between the storm event sampled and the previous measurable (greater than 0.1 inch rainfall) storm event; and estimate of the total volume (in gallons) of the discharge sampled.

TABLE V–5.—DISCHARGES FROM COAL AND/OR WOOD CHIP STORAGE AREAS

Parameter	Unit	Frequency	Sample type
Flow	gallons	semiannual	estimate.
pH	standard	do	grab.
Total suspended solids.	mg/L	do	Do.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

[2] The resultant runoff should contain no visible sheen and no visible discharge of oil, floating solids, or foam other than in trace amounts.

TABLE V–6.—STORM WATER RUNOFF FROM PETROLEUM STORAGE AND HANDLING AREAS

Parameter	Unit	Frequency	Sample type
Flow	gallons	semi-annual.	estimate.
pH	standard	do	grab.
Benzene	µg/L	do	Do.
Oil and Grease.	mg/L	do	Do.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

c. Sample type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for a grab sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

d. Toxicity testing—(1) Test procedures—(a) The permittee shall conduct acute 24-hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4–90–027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater bodies. Due to the nonsaline nature of rainwater, freshwater should also be used for discharges to estuarine, marine, or other naturally saline waterbodies.

(b) All test organisms, procedures, and quality assurance criteria used shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA/600/4–90–027, or the most current edition. The control water used will be moderately hard water as described in EPA/600/4–90–027, Table 6, or the most current edition.

(c) Tests shall be conducted annually (once per year) on a grab sample of the discharge. Test shall be conducted using 100 percent effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4–90–027 (or the most current edition), Section 12, Report Preparation, and the report submitted to EPA with the Discharge

Monitoring Reports (DMRs). On the DMR, the permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

(2) If acute whole effluent toxicity (statistically significant difference between the 100 percent dilution and the control) is detected in the storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the sources of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

e. Reporting: when to submit—(1) Permittees that are required to conduct sampling pursuant to Section 7.a. shall monitor samples collected during the sampling period running from January to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January.

(2) Permittees that are required to conduct sampling pursuant to Part XI.V.7.b. shall monitor samples collected during the sampling period from July to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following required for each sampling period. The first report may include less than 12 months of information.

8. Cost Estimates

This section, which covers textile mills, apparel and other fabric product manufacturing facilities, does not include numeric effluent limits. The BMPs described within today's proposed permit and fact sheet are designed to prevent or minimize pollutants in the storm water runoff. Facilities choose and implement the BMPs which best fit site specific requirements. Because this section does not contain numeric effluent limits or requirements to implement specific, predetermined BMPs, an economic achievable analysis is not required.

W. Storm Water Discharges Associated With Industrial Activity From Wood and Metal Furniture and Fixture Manufacturing Facilities

1. Discharges Covered Under This Section.

On November 16, 1990 (55 FR 47990), the U.S. Environmental Protection Agency (EPA) promulgated the regulatory definition of "storm water discharges associated with an industrial activity." This definition included point source discharges of storm water from eleven major categories of facilities, including facilities under Standard Industrial Classification (SIC) codes 2434 and 25. Part XI.W. of today's proposed permit only covers storm water discharges associated with industrial activities from furniture and fixture manufacturing facilities. Furniture and fixture manufacturing facilities eligible for coverage under this section include facilities identified by the following SIC codes:

- Wood Kitchen Cabinets (SIC Code 2434).
- Household Furniture (SIC Code 251).
- Office Furniture (SIC Code 252).
- Public Buildings and Related Furniture (SIC Code 253).
- Partitions, Shelving, Lockers, and Office and Store Fixtures (SIC Code 254).
- Miscellaneous Furniture and Fixtures (SIC Code 259).

Storm water discharges covered by this section include all discharges where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to precipitation and storm water runon. Storm water that does not come into contact with an industrial activity or a significant material are not subject to permitting according to 40 CFR 122.26. This section is not applicable to any discharge subject to effluent limitation guidelines. However, the storm water component of the unpermitted discharge may be included under this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Industry Profile

The manufacturing processes for furniture and fixture manufacturing facilities are not typically exposed to storm water. However, unloading operations and the storage of some raw materials, and waste products, may be exposed to precipitation. Because of the lack of industrial activities occurring outdoors and the necessity of keeping many of the raw materials dry, the primary sources of storm water pollutants originate from materials handling and waste management or disposal activities. Table W–1 lists potential pollutant source activities, and related pollutants associated with furniture and fixture manufacturing facilities. There are two primary types of furniture and fixture manufacturing facilities. The distinction is based on the primary raw material, wood or metal. The manufacturing processes and significant materials to produce wood and metal furniture or fixtures are not similar. However, the manufacturing activities and wood resources are not typically exposed to precipitation.

TABLE W–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS

Activity	Pollutant source	Pollutant
Wood drying	Coal	TSS, pH, cadmium, arsenic.
	Saw dust	TSS, COD, BOD_5, pH.
	Ash	TSS, pH.
Furniture manufacturing.	Sizing operations.	TSS, BOD_5, pH.
	Painting operations	Lead, cadmium, COD.
	Gluing operations.	Solvents, COD, oil and grease.

TABLE W–1.—ACTIVITIES, POLLUTANT SOURCES, AND POLLUTANTS—Continued

Activity	Pollutant source	Pollutant
	Used rags	Solvents, COD, oil and grease.
	Processing materials unloading.	Diesel fuel, gasoline, oil, TSS.
	Waste material transportation.	TSS, BOD_5, pH.
	Treatment facilities.	Solvents, COD, oil & grease.
	Open dumps .	TSS, BOD_5, oil & grease, COD.
Other activities.	Air emission control cleaning.	TSS, pH, cadmium, lead, copper, zinc.

Source: Storm Water Group Applications, Parts 1 and 2.

Industrial activities occurring at furniture and fixture manufacturing facilities that pertain to the storm water rule include, "* * * but [are] not limited to, storm water discharges from industrial plant yards; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR Part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water" (40 CFR 122.26(b)(14)). The most common industrial activities at furniture and fixture manufacturing facilities include material handling sites and raw material storage areas.

Significant materials include, ". . . but [are] not limited to: Raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under Section 101(14) of CERCLA; any chemical facilities required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges" (40 CFR 122.26(b)(12)). Significant materials commonly found at furniture and fixture manufacturing facilities include: Wood; saw dust; metals; petroleum-based products; solvents; detergents; and waste materials.

Manufacturers of furniture and fixtures are separated by the primary raw material (i.e., wood and metal). The primary raw materials, industrial processes, waste and by-products, and final products differ for the production of wood furniture and metal furniture. Within each subsector the number of industrial activities and corresponding significant materials and waste products may also vary. Presented below are brief descriptions of the industrial activities and significant materials associated with the manufacturing of wood and metal furniture and fixtures. Due to similarities in the production of furniture and fixtures within subsectors, industrial activities and significant materials are fairly uniform across this sector. Unique practices are noted.

a. Manufacturing of wood furniture and fixtures. The process of manufacturing wood furniture begins with the delivery and storage of wood. There are three different raw wood materials; lumber, veneer, and particle board. Since the manufacturing processes are not typically exposed to storm water for this industry, some of the "industrial activities" described below may not be susceptible to storm water exposure. Significant materials and materials management practices do refer to those materials exposed to storm water, and to the subsequent management practices used to control storm water. Variations on exposure to industrial activities and significant materials are site-specific.

(1) Industrial activities. Once delivered, raw lumber is allowed to air dry up to 1 year. After the lumber is sufficiently air dried it is then transported to a dry kiln for further drying. The lumber is kiln dried anywhere from 7 to 150 days. Once the lumber has been dried to a desired moisture content, the dried lumber is taken to the processing area. The remaining furniture manufacturing processes are all completed indoors. Manufacturers may also receive lumber that is already dried. Therefore, the manufacturers may not need to air or kiln dry the wood and proceed directly into the processing stage.

The dried lumber is run through planers, to create a smooth, preliminary working surface, and then cut to specified dimensions depending on the end use. The sized lumber is then taken through sanding and machining operations. Sanding produces a smooth, fine working surface. Machining can include boring, routing, lathe operations, mitre cutting, and finish cuts. From this point, each piece of wood is dedicated to a specific product.

Veneer is another raw material used in the production of furniture. In this process logs are placed in a steam vat to increase the moisture content of a log. The logs are turned on a lathe to peel off the veneer. The resulting veneer sheets are layered into stacks or "hacks." Moisture is removed from the hacks by kiln drying. After a desired moisture content has been achieved the hacks are disassembled. Veneer is frequently hot or cold pressed onto particle board or solid wood by utilizing adhesives.

Particle board is the third raw material incorporated into the manufacturing of wood furniture. The board is received, cut to size, and banded on all four edges with solid wood. The banding is accomplished in continuous, steam heated units utilizing adhesives. The panels are allowed to cool and then they are sanded. Particle board is frequently coated with veneer.

The products from the three raw materials may be combined during the machining and sanding step or during the final assembly of a furniture piece. The machining and sanding step may include: initial sizing of particle board, veneer, and lumber; laminating operations; and surface printing. Once all the pieces of a particular furniture item are manufactured and sized, assembly can begin. This process generally involves an assembly line routing with many different individuals and machines working together to build the unit.

The final step in creating an unupholstered piece of furniture involves surface finishing. This process may involve many separate coats of stains, lacquers, sealers, and finishes to a single unit. This is the step where a uniform wood color and texture are given to each piece of furniture or furniture grouping.

Facilities that manufacture upholstered furniture may have all of the previously mentioned activities, or may purchase dried or sized materials from a manufacturer. Upholstered furniture manufacturers will transport, handle, store, and process natural and synthetic fibers used for the upholstery. After the wood component of an upholstered piece of furniture is assembled, the upholstery materials are cut, sized, stretched, and then attached to the frame. After the final inspection of a furniture piece, the unit is packaged and either stored temporarily onsite or immediately shipped to an offsite location.

(2) Significant materials. The significant materials identified, in part 1

of the group applications, as exposed to storm water at wood furniture and fixture manufacturing facilities include: Raw wood; sawdust; coal; kiln ash; solvent-based finishing materials and waste products; used rags; raw glue and waste materials; and petroleum-based products. While most of the raw wood material is stored outside, more valuable wood products (e.g., sheets of veneer, mahogany, etc.) and some composite wood products (e.g., particle board) may be stored inside or under cover.

b. Manufacturing of metal furniture and fixtures. Many furniture and fixture manufacturing facilities build their furniture with metal as the primary raw material. However, some manufacturers combine wood and upholstered materials with a metal frame. Metal furniture manufacturing facilities may purchase wood pieces ready for assembly or they may have all the industrial activities of wood manufacturing facilities in addition to the metal manufacturing facilities. The industrial activities at metal furniture manufacturing facilities will be site-specific and depend upon the level of work necessary to shape and treat the delivered metal into a furniture piece.

(1) Industrial activities. Facilities that manufacture metal household furniture maintain all operations including: Machining and assembly; finishing; and temporary storage of finished products within an enclosed building. Cold roll steel is initially received and temporarily stored within the manufacturing building. However, steel may be stored outside prior to use. The steel is cut to size, bent, and welded to design specifications to fabricate raw metal household furniture. Final grinding, sanding, finishing, spot welding, and painting are then completed. After the final inspection of a furniture piece, the unit is packaged and either stored temporarily onsite or immediately shipped to an offsite location.

(2) Significant materials. The significant materials identified as exposed to storm water, in part 1 of the group applications, at metal furniture and fixture facilities include: Metals; sawdust; solvent-based finishing materials and waste products; electroplating solutions and sludges; used rags; raw glue and waste materials; and petroleum-based products. The raw metal may be stored outside, exposed to storm water prior to manufacturing, but will be brought indoors for manufacturing.

3. Pollutants in Storm Water Discharges Associated With Furniture and Fixtures Manufacturing Facilities

Few pollutants are expected in storm water discharges from the manufacturing of wood and metal furniture and fixtures because the majority of the industrial activities occur indoors. Pollutants may be present in storm water as a result of outdoor activities associated with the manufacturing of wood and metal furniture and fixture such as: Material handling operations; waste disposal; raw material storage; and deposition of airborne particulate matter. In addition, sources of pollutants other than storm water, such as illicit connections, spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Many of the part 2 group application data submittals did not identify individual site characteristics or sources of storm water pollutants which may be responsible for pollutant loadings. In addition, the limited response from sampling facilities did not allow for a separation of sampling data submitted by wood and metal manufacturing facilities. Therefore, the only option available to EPA was to use the data in the aggregate.

EPA has identified the storm water pollutants and sources resulting from furniture and fixture manufacturing facilities in Table W–1. Table W–1 identified several pollutants including total suspended solids (TSS), oil and grease, and chemical oxygen demand (COD) as pollutants of concern at furniture and fixture manufacturing facilities.

Table W–2 indicates the sampling data results, for Section VII–A of Form 2F, from 18 of the sampling facilities required to submit data. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of outfalls sampled for each of the pollutants. Variations in the minimum and maximum values were found to be small, relative to other industrial sectors in today's proposed permit for the eight conventional pollutants. The range in values, means, and medians for the conventional pollutants sampled were typically low. However, upon review of additional sampling data submitted to EPA after Table W–2 was compiled, EPA has found the additional data not to be outside the values listed in Table W–2.

Data submitted for arsenic, cadmium, copper, lead, nickel, and zinc were measured at less than 10 ppb for those facilities submitting data. Few facilities submitted sampling data for these constituents, indicating that facility operators did not anticipate loadings greater than 10 ppb.

TABLE W–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i] (mg/L, except as noted)

Pollutant	No. of samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	25	24	12.2	8.8	0.0	0.0	46.0	32.0	9.0	6.0	44.0	26.0	46.0	32.0
COD	25	24	96.0	76.3	0.0	0.0	300.0	240.0	83.0	72.5	230.0	180.0	300.0	240.0
Nitrate + nitrite nitrogen	25	24	1.73	1.51	0.0	0.0	12.0	10.0	0.9	0.675	6.2	5.6	12.0	10.0
Total kjeldahl nitrogen	25	24	4.37	4.4	0.0	0.6	46.0	55.0	1.7	1.350	15.0	13.0	46.0	55.0
Oil & grease	25	N/A	3.8	N/A	0.0	N/A	33.0	N/A	0.0	N/A	14.0	N/A	33.0	N/A
pH (s.u.)	23	N/A	N/A	N/A	4.2	N/A	9.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total phosphorus	25	24	0.27	0.26	0.0	0.0	1.1	1.3	0.2	0.185	0.89	0.71	1.1	1.3
Total suspended solids	25	24	188	143	3	2	891	900	130	91	440	550	891	900

[i] Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

Below is a discussion of the pollutants of concern:

• Chemical oxygen demand (COD)—COD measures the total amount of oxygen necessary for oxidation. COD is an effective indicator of levels of biologically resistant organic substances. Higher COD levels, for example, may be attributed to the presence of biologically resistant organics, such as oil and grease. COD data submitted in the part 2 applications from wood and metal furniture and metal manufacturing facilities indicate the following:

—The mean concentrations for grab and composite samples were 96.0 mg/L and 76.3 mg/L, respectively
—The median concentrations for grab and composite samples were 83.0 mg/L and 72.5 mg/L, respectively
—The 95th percentile concentration (i.e., 95 percent of the values are below) for grab and composite samples were approximately 230 mg/L and 180 mg/L, respectively.
—The 99th percentile concentration (i.e., 99 percent of the values are below) for grab and composite samples were 300 mg/L and 240 mg/L, respectively.

These mean and median COD concentrations are within the recommended load estimates storm water runoff from residential and commercial areas.[124] Therefore, EPA does not believe it is necessary to impose continued monitoring of COD.

• Oil and grease—There are several sources of oil and grease from wood and metal furniture and fixture manufacturing facilities. These sources include unloading/loading areas; vehicle/equipment maintenance and cleaning; and outdoor storage of vehicles, equipment and castings. Oil and grease emulsions are detrimental to aquatic organisms and inhabitants because: (1) deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

Oil and grease data submitted in part 2 applications for wood and metal furniture and fixture manufacturing facilities indicate the following:

—The mean concentration was 3.8 mg/L
—The median concentration was 0.0 mg/L
—The 95th percentile concentration (i.e., 95 percent of the values are below) was 14 mg/L
—The 99th percentile concentration (i.e., 99 percent of the values are below) was 33 mg/L.

The most stringent storm water effluent guidelines establish a limit of 15 mg/L of oil and grease in a discharge.[125] The part 2 data indicates that the mean and median concentration of oil and grease are below this limit and, therefore, EPA does not believe it is necessary to impose continued monitoring for oil and grease.

• *pH*—pH is a measure of the acidity or alkalinity of a discharge. On the pH scale ranging from zero to fourteen, a value of seven represents neutral conditions in which the concentrations of hydrogen and hydroxyl ions are equal. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions.

The pH level is easily measured and is an indication of potential environmental impacts. Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change. Part 2 applications from wood and metal furniture and fixture manufacturing facilities indicated that less than 5 percent of the sampling facilities reported a pH below 6 standard units.

Data submitted for part 2 of the application indicate that pH levels are generally inside the permitted range for wastewater discharges under effluent limitation guidelines. Therefore, EPA does not believe continued monitoring for pH is justified.

• *Total Suspended Solids (TSS)*—TSS is associated with wood and metal furniture and fixture manufacturing facilities because some sites have exposure to significant materials like coal piles and refuse piles. Many part 2 applications have indicated the source of high TSS levels to be coal pile runoff and runoff from refuse piles. Suspended solids increase the turbidity of water allowing less light to penetrate the water, thereby reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish. TSS data submitted in the part 2 applications for wood and metal furniture and fixture manufacturing facilities indicate the following:

—Approximately 4 percent of the sampling facilities reported TSS levels above 450 mg/L
—The mean concentrations for grab and composite samples were 188 mg/L and 143 mg/L, respectively
—The median concentrations for grab and composite samples were 130 mg/L and 91 mg/L, respectively
—The 95th percentile concentration (i.e., 95 percent of the values are below) for grab and composite samples were 440 and 550, respectively
—The 99th percentile concentration (i.e., 99 percent of the values are below) for grab and composite samples were 891 mg/L and 900 mg/L, respectively.

The mean and median concentrations for TSS are inside the recommended load estimates for runoff from residential and commercial areas.[126] The high TSS levels have been found to be associated with facilities that indicated the primary source of TSS to be coal pile runoff and runoff from refuse piles. Since these sources of storm water contamination are addressed elsewhere in today's permit, the primary source of high TSS levels will be controlled regardless of the conditions within this section of today's permit. Therefore, EPA does not believe that continued monitoring for TSS is necessary.

• *Heavy metals*—EPA is not proposing to require monitoring of metals by facilities covered under today's proposed permit. As required by 40 CFR 122.26(g) (ii) and (iii), group applicants were only required to sample for metals if the facility knew or had reason to believe it would be expected in the discharge. Few facilities submitted data on heavy metals even though the discharges were less than 10 ppb. EPA considers any high heavy metals values to be atypical of those

[124] EPA. December 1983. "Results of the National Urban Runoff Program."

[125] Per 40 CFR Part 419.

[126] EPA. December 1983. "Results of the Nationwide Urban Runoff Program."

experienced by the majority of wood and metal furniture and fixture manufacturing facilities. Therefore, EPA does not believe it is necessary to impose monitoring conditions for heavy metals.

4. Options for Controlling Storm Water Pollutants

Certain BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges.

Part 1 group application data indicate that few BMPs have been implemented at wood and metal furniture and fixture manufacturing facilities. The only BMPs identified in the part 1 applications include: closed tanks, drums, and metal boxes; and partial covering. The part 1 data submissions did not indicate the presence of any traditional BMPs, such as sedimentation and retention ponds, or diversion dikes. However, the group application process did not require a description, or identification, of traditional BMPs, only the identification of material management practices that limit the contact between storm water and significant materials.

Because BMPs described in the part 1 data are limited, EPA is providing an overview of supplementary BMPs for use at furniture and fixture manufacturing facilities. However, inclusion of a BMP cited does not preclude the use of other viable BMP options. Table W–3 summarizes BMP options as they apply to wood and metal furniture and fixture manufacturing facilities. Sources of BMP information include: "Sediment and Erosion Control: An Inventory of Current Practices—Draft," EPA, April 20, 1990; "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September 1992 (EPA 832–R–92–006); and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

TABLE W–3.—STORM WATER BMPS FOR FURNITURE AND FIXTURE MANUFACTURING FACILITIES

Activity	Best management practices (BMPs)
Outdoor unloading and loading	Confine loading/unloading activities to a designated area. Perform all loading/unloading activities in a covered or enclosed area. Close storm drains during loading/unloading activities in surrounding areas. Avoid loading/unloading materials in the rain. Inspect all containers prior to loading/unloading of any raw or spent materials. Berm, curb, or dike loading/unloading areas. Use dry clean-up methods instead of washing the areas down. Train employees on proper loading/unloading techniques.
Outdoor material storage (including waste and particulate emission management).	Confine storage of raw materials, parts, and equipment to designated areas. Train employees on proper waste control and disposal. Berm, curb, or dike any areas around tanks. Ensure that all containers are properly sealed and valves closed. Inventory all raw and spent materials. Inspect air emission control systems regularly, and repair or replace when necessary. Store wastes in covered, leakproof containers (e.g., dumpsters, drums). Store wastes in enclosed and/or covered areas. Ensure hazardous and solid waste disposal practices are performed in accordance with applicable Federal, State, and local requirements. Ship all wastes to offsite landfills or treatment facilities.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991, through December 31, 1992, and EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

Many of the BMPs identified in Table W–3 are reminders of good or preferred operating procedures that are intended to limit the exposure of significant materials and industrial activities to storm water. Facility operators should review their current operations and consider implementing these BMPs if they are applicable to the site and reduce storm water contamination.

Since none of the facilities within the wood and metal furniture and fixture manufacturing sector indicated the presence of traditional storm water management practices, EPA is requiring the participants of this sector to consider the implementation of storm water diversions and sediment control and collection structures.

Discharge diversions provide the first line of defense in preventing the contamination of discharges, and subsequent contamination of receiving waters of the United States. Discharge diversions are temporary or permanent structures installed to divert flow, store flow, or limit storm water runon and runoff.

These diversion practices have several objectives. First, diversion structures can be designed to prevent otherwise uncontaminated (or less contaminated) water from crossing disturbed areas or areas containing significant amounts of contaminated materials, where contact may occur between runon and significant materials. These source reduction measures may be particularly effective for preventing uncontaminated discharges from contacting exposed materials and/or reduce the flow across disturbed areas, thereby lessening the potential for erosion. Second, diversion structures can be used to collect or divert waters for later treatment, if

necessary. The usefulness of these control measures are limited by such factors as the size of the area to be controlled and the type and nature of materials exposed and precipitation events.

Diversion dikes, curbs, and berms are temporary or permanent diversion structures that prevent runoff from passing beyond a certain point, and divert runoff away from its intended path. Dikes, curbs or berms may be used to surround and isolate areas of concern at wood and metal furniture manufacturing facilities, and divert flow around piles of significant materials in order to minimize or limit offsite discharges of contaminated storm water.

Sediment control and collection limits movement and retains sediments from being transported offsite. Several structural collection devices have been developed to remove sediment from runoff before it leaves the site. Several methods of removing sediment from site runoff involve diversion mechanisms previously discussed, supplemented by a trapping or storage device. Structural practices typically involve filtering diffuse storm water flows through temporary structures such as straw bale dikes, silt fences, brush barriers or vegetated areas.

However, structural practices require periodic removal of sediment to remain functional, for both temporary and permanent structures. As such, they serve as more active-type practices which may not be appropriate for permanent use at inactive mines. However, these practices may be effectively used as temporary measures during active operation and/or prior to the final implementation of permanent measures. Temporary structures include: plastic matting, plastic netting, and erosion control blankets; mulch-straw or wood chips; and compaction. Permanent sediment control and collection structures include: sediment/settling ponds; sediment traps or catch basins; and vegetated buffer strips.

5. Storm Water Pollution Prevention Plan Requirements

All facilities subject to this section must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of furniture and fixture manufacturing facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provide a flexible framework for the development and implementation of site-specific controls to minimize pollutants in storm water discharges. This approach is consistent with the approach used in the baseline general permits finalized on September 9, 1992 (57 FR 41236). EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from furniture and fixture manufacturing facilities. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as: facility size; climate; geographic location; geology/hydrology; the environmental setting of each facility; volume and type of discharge generated, and current BMPs. This flexibility is necessary because each facility will be unique in that the source, type, and volume of contaminated surface water discharges will differ from site to site.

There are two major objectives to a pollution prevention plan: (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with an industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility. Specific requirements for a pollution prevention plan for furniture and fixture manufacturing facilities are described below. These requirements must be implemented in addition to the pollution prevention plan provisions discussed previously, or any other industry-specific requirements to which the facility is subject. For example, facilities with coal piles must comply with the provisions for coal pile runoff, as well as the pollution prevention requirements for the furniture and fixture manufacturing industry.

a. *Description of potential pollution sources.* Under the drainage requirements, the site map must show areas where the following activities, if applicable, take place: Fueling; vehicle and equipment maintenance and/or cleaning; loading and unloading; material storage (including tanks or other vessels used for liquid or waste storage); outdoor material processing; waste treatment, storage, or disposal; haul roads; access roads; and rail spurs.

b. *Measures and controls.* Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, BMPs, and other controls that will be implemented at the facility. The permittee must assess the applicability of the following categories of BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, and good housekeeping measures. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected structural control or BMP is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

Under the preventive maintenance requirements of the pollution prevention plan, permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. The maintenance program requires periodic removal of debris from discharge diversions and conveyance systems. These activities should be conducted in the spring, after snowmelt, and during the fall season. Permittees already controlling their storm water runoff with impoundments or sedimentation ponds must include the maintenance schedules for these ponds in the pollution prevention plan.

Under the inspection requirements of the pollution prevention plan, operators of furniture and fixture manufacturing facilities are required to conduct quarterly visual inspections of BMPs and materials loading/unloading areas. The inspections shall include: (1) An assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures; (2) visual inspections of vegetative BMPs to determine if soil erosion has occurred; and (3) visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

The visual inspections of BMPs and loading/unloading areas must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event. Visual inspections shall be conducted in each of the following periods: December to February (storm water runoff or snow

melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt). Visual inspections shall be conducted within the first 60 minutes of when the runoff begins discharging. Results from the visual inspection must be maintained onsite and include the examination date, time, and the name of personnel conducting the visual inspection.

EPA believes that this quick and simple description will allow the permittee to assess the effectiveness of his/her plan on a regular basis at very little cost. The examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the pollution prevention plan. If a BMP is found to be ineffective, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by facility staff. This hands on inspection will also enhance the staff's understanding of the storm water problems on that site and effects on the management practices that are included in the plan.

Under the recordkeeping and internal reporting procedures of the pollution prevention plan, the permittee must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring (if applicable), and BMP inspection and maintenance activities. Ineffective BMPs must be recorded and the date of their corrective action noted. According to the pollution prevention plan requirements, the permittee must evaluate the appropriateness of each storm water BMP that diverts, infiltrates, reuses, or otherwise reduces the discharge of contaminated storm water. In addition, the permittee must describe the storm water pollutant source area or activity (i.e., loading and unloading operations, raw material storage piles etc.) to be controlled by each storm water management practice.

6. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44 (i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities covered by this section of today's permit. Based on a consideration of the nature of BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at wood and metal furniture and fixture manufacturing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow melt to runoff. EPA expects that, whenever practicable, the same individual will carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands on inspection will enhance the staff's understanding of the storm water problems on that site and effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that monitoring is necessary for wood and metal furniture and fixture manufacturing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in part 2 group applications.

X. Storm Water Discharges Associated With Industrial Activity From Printing and Publishing Facilities

On November 16, 1990 (55 FR 47990) EPA promulgated the regulatory definition of "storm water discharge associated with industrial activity." This definition includes point source discharges of storm water from eleven categories of facilities, including ". . . category (xi) facilities classified as Standard Industrial Classification (SIC) code . . . 27." Under this SIC code, facilities eligible for coverage under this section include:

- Book Printing (SIC Code 2732).
- Commercial Printing, Lithographic (SIC Code 2752).
- Commercial Printing, Gravure (SIC Code 2754).

• Commercial Printing, Not Elsewhere Classified (SIC Code 2759).
• Platemaking and Related Services (SIC Code 2796).

This section establishes special condition for storm water discharges associated with industrial activities at printing and publishing facilities. The SIC codes of these facilities are in category (xi) of the definition of storm water discharges associated with industrial activity. Storm water discharges from facilities in this category are only regulated where precipitation and storm water runon come into contact with areas associated with industrial activities, and significant materials. Significant materials include, but are not limited to, raw materials, waste products, finished products, intermediate products, by-products, and other materials associated with industrial activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

The printing and publishing industry is composed of a heterogeneous collection of over 38,000 companies that range in size from a few employees to several thousand.[127] Some companies are involved in both printing and publishing, while others are exclusively one or the other. The industrial activities of these facilities are similar, but the finished products vary. The finished products include magazines, newspapers, books, and labels. The printing activities covered under this section occur strictly indoors, and are separated into distinct operations. They include book printing, commercial printing (lithographic and gravure), and platemaking for printing purposes. The lithographic printing operation, which is based on the premise that grease and water do not mix, consists of a printing plate or cylinder, ink, a blanket and paper. Areas on the printing plate which will be transferred are coated with grease, and the rest of the plate is kept moist with water. The ink adheres to the grease and is repelled by the water. The printing image is then transferred to a blanket, which is transferred to paper. The gravure printing process uses printing plates or cylinders, ink, and paper. In the gravure process, the image is engraved on the printing plate or cylinder, the ink is then picked up by the engraved cells and directly transferred to paper. Other printing methods include screen, letter press, and flexographic printing. In the platemaking process, plates are cut from metal (usually steel), formed, engraved with the image, and coated with copper sulfate or chromic acid. The plates are later used in the printing processes described above.

Aside from the specific printing activities, other types of industrial activities are shared by facilities covered under this section. For example, the majority of these facilities have outdoor material handling and storage activities, and share the same types of raw and waste materials.

The primary raw materials utilized by this industry group include paper (including wax paper and card stock at some facilities), printing inks (hydrocarbon based, solvent based), and solvents. Other raw materials include steel (for facilities which manufacture printing plates), toner, paints, lubricating fluids, fuels, coating materials, and adhesives/glues. The paper products are stored indoors because exposure to precipitation would destroy the quality. The other raw materials arrive at the facilities in drums and either remain in the drums or are stored in aboveground or underground tanks, depending on the facilities' space and primary activity. The outdoor storage areas for drums are sometimes covered, but when the drums are directly exposed to precipitation, the storage areas are diked. Within the facilities, drums are stored on wooden pallets or skids, which may become contaminated from spills of the stored materials. After use the pallets and skids are stored outside for disposal and have the potential to contaminate storm water discharges.

The wastes produced from the printing process are both nonhazardous and hazardous. Hazardous wastes including ink wastes, solvent wastes, and waste chromic and sulfuric acid. These wastes are generated in small quantities at some of the facilities within this industrial group. Solvent wastes results from cleaning of printing plates and metal cutting operations. Ink wastes are generated from the cleaning of printing plates and from excess ink used in printing. Chromic and sulfuric acid wastes are generated from facilities which manufacture and coat rotogravure printing plates.

Nonhazardous wastes from this industry group include waste paper, paper dust, scrap steel, and used wooden pallets. All of these waste materials have the potential to pollute storm water discharges.

Significant materials exposed to storm water at these facilities consist of raw materials and waste materials. They include solvents (toluene, xylene, acetone, 1,1,1-trichloroethane), fuels (gasoline and diesel), inks, metal, lubricating oils, pallets, copper, chromium, acids (sulfuric and chromic), oil and grease, and waste paper. Some of these materials are directly exposed to storm water, while others are potentially exposed due to covering. Pollutants of concern include TSS, pH, heavy metals, oil and grease, and COD.

Material handling activities such as loading and unloading areas, and liquid transfer (solvents from outdoor storage tanks to facility) may be exposed to storm water discharges. Exposure of these areas to storm water may be minimized by covering of the shipping/receiving and liquid transfer areas.

For those facilities engaged in fueling and vehicle maintenance, gasoline and diesel fuel are frequently stored outdoors in aboveground storage tanks and drums. Most vehicles and equipment require oil, hydraulic fluids, antifreeze, and other fluids that may leak and contaminate storm water discharges.

2. Pollutants Found in Storm Water Discharges From Printing and Publishing Facilities

The impact of industrial activities on storm water discharges at printing and publishing facilities will vary. Factors at a site which influence the water quality include geographic location, hydrogeology, the industrial activities exposed to storm water discharges, the facility's size, the types of pollution

[127] "Economic Analysis of Proposed Effluent Guidelines, Printing Industry." Office of Planning and Evaluation, EPA. August 1974.

prevention measures/best management practices in place, and the type, duration, and intensity of storm events. Taken together or separately, these factors determine how polluted the storm water discharges will be at a given facility. Additionally, pollutant sources other than storm water, such as illicit connections,[128] spills, and other improperly dumped materials, may increase the pollutant loading discharged into Waters of the United States. Table X–1 lists industrial activities that commonly occur at printing and publishing facilities, the pollutant sources at these facilities, and the pollutants associated with these activities. Table X–1 identifies heavy metals, oil and other parameters as potential pollutants of concern associated with printing and publishing facilities.

TABLE X–1.—DESCRIPTION OF INDUSTRIAL ACTIVITIES, POTENTIAL POLLUTANT SOURCES, AND ASSOCIATED POLLUTANTS [i, ii, iii]

Activity	Pollutant source	Pollutant
Plate preparation	Using ink (lithography, letterpress, screen printing, flexography), etch baths, applying lacquer.	Solvent, Heavy metal, toxic waste ink with solvents chromium, lead.
Printing	Using ink (lithography, letterpress, screen printing, flexography), gravure.	Heavy metal waste (dust and sludge), ink—sludges with chromium or lead, ink—toxic wastes with metals, solvents.
Clean up	Used plates: type, die, press blankets and rollers	Ink—toxic wastes with metals, solvents.
Stencil preparation for screen printing.	Lacquer stencil film, photoemulsion, blockout (screen filler).	Solvents, photographic processing wastes.
Material handling: Transfer, storage, disposal.	Spills and leaks from material handling equipment	Fuel, oil, heavy metals.
	Spills and leaks from aboveground tanks	Fuel, oil, heavy metals, material being stored.
	Solvents; trash; petroleum products	Heavy metals, spent solvents, oil.
Photoprocessing	Developing negatives and prints	Heavy metals, spent solvents.

[i] EPA, Pollution Prevention Programs, Opportunities in Printing. Philadelphia, PA. October 1990.
[ii] University of Pittsburgh Trust, Center for Hazardous Materials Research Fact Sheet, Pollution Prevention: Strategies for the Printing Industry.
[iii] EPA, Resource Conservation and Recovery Act (RCRA) document, Does Your Business Produce Hazardous Waste as Many Small Businesses Do. Printing and Allied Industries, EPA/530–SW–90–027g, April 15, 1990.

Part 2 group application data that was statistically summarized indicated large variations in the minimum and maximum values reported for each of the eight conventional pollutants monitored:

- Oil and grease samples ranged from 0.0 mg/l to 98 mg/L.
- Grab sample values for Total Suspended Solids (TSS) ranged from 0.0 mg/l to 660 mg/L.
- Grab samples for Chemical Oxygen Demand (COD) ranged from 0.0 mg/l to 231 mg/L.

The remaining conventional pollutants sampled also varied in their minimum and maximum values; however, the values were typically low relative to other sectors in today's proposed permit. EPA believes that the high levels of pollutants at some facilities are atypical to those experienced by the majority of printing and publishing facilities. Table X–2 shows the sampling results for the conventional pollutants that were statistically analyzed by EPA. This table lists the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of samples analyzed for each of the conventional pollutants.

[128] Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any number of sources including improper connections, dumping or spills from industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at facilities manufacturing transportation equipment, industrial or commercial machinery is low but it may be applicable at some operations.

TABLE X–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i] (mg/L, except as noted)

Pollutant	# of Samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample Type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	27	27	11	7.0	0.0	0.0	61.8	24.0	9.0	6.4	49.0	22.2	61.8	24.0
COD	27	27	57.2	42.4	0.0	0.0	231.0	156.0	49.0	39.0	176.0	119.0	231.0	156.0
Nitrate + nitrite nitrogen	20	20	1.27	1.35	0.0	0.0	5.8	5.3	.823	1.045	4.0	4.49	5.8	5.3
Total kjeldahl nitrogen	27	27	3.13	1.57	0.0	0.0	10.0	6.7	1.5	.84	10.0	4.6	10.0	6.7
Oil and grease	27	N/A	12.6	N/A	0.0	N/A	98.0	N/A	2.5	N/A	56.0	N/A	98.0	N/A
pH (s.u.)	20	N/A	N/A	N/A	5.5	N/A	8.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total phosphorus	27	27	.37	.35	0.0	0.0	1.8	2.1	.14	.13	1.5	1.3	1.8	2.1
Total suspended solids	27	27	92	31	0	0	660	104	30	28	433	82	660	104

[i] Applicants that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[ii] Composite samples.

3. Options for Controlling Pollutants.

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology)]. The Agency does not believe that it is appropriate to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from facilities which manufacture transportation equipment, industrial or commercial machinery to meet BAT/BCT standards of the Clean Water Act. Instead, this section establishes requirements for the development and implementation of site-specific storm water pollution prevention plans consisting of a set of Best Management Practices (BMPs) that are sufficiently flexible to address different sources of pollutants at different sites.

Certain BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges. The types of BMPs implemented will depend on the type of discharge, types and concentrations of contaminants, and the volume of the flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: Facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with printing and publishing facilities.

Part 1 group application data indicate that BMPs have not been widely implemented at the representative sampling facilities. Less than 10 percent of the sampling subgroup reported that they store some materials indoors; less than 10 percent store hazardous wastes under roof; and less than 5 percent cover drums or have sealed drums. However, 45 percent of the subgroup utilize some type of covering; 45 percent implement good housekeeping practices; and over 40 percent have training on pollution prevention.

The measures commonly used to reduce pollutants in storm water discharges associated with printing and publishing facilities are generally simple and easy to implement. Table X–3 identifies best management practices (BMPs) associated with different activities that routinely occur at printing and publishing facilities.

TABLE X–3.—GENERAL STORM WATER BMPS FOR PRINTING AND PUBLISHING FACILITIES [i, ii, iii, iv]

Activity	Best management practices (BMPs)
Plate preparation	Use aqueous-developed lithographic plates or wipe-on plates.
Printing	Use press wipes as long as possible before discarding or laundering; dirty ones for the first pass, clean ones for the second pass.
	Squeeze or centrifuge solvent out of dirty rags.
	Set up an in-house dirty rag cleaning operation if warranted or sent to approved industrial laundries, if available.
	Dedicated press for inks with hazardous pigments/solvents.
	Segregate used oil from solvents or other materials.
	Use water-based inks in gravure and flexographic printing process.
Clean up	Label sinks as to proper disposal of liquids.
	Keep equipment in good condition.
	Use doctor blades and squeegees to remove as much ink as possible prior to cleaning with solvent and rags.
	Control solvent use during equipment cleaning, use only what you need.
	Designate special areas for draining or replacing fluids.
	Substitute nontoxic or less toxic cleaning solvents.
	Recover waste solvents onsite with batch distillation if warranted or utilize professional solvent recyclers.
	Centralized liquid solvent cleaning in one location.
	Have refresher courses in operating and safety procedures.
Stencil preparation for screen printing.	Recapture excess ink from silkscreen process before washing the screen to decrease amount of ink used and cleaning emulsion used.
Material Handling and Storage Areas.	Store containerized materials (fuels, paints, inks, solvents, etc.) in a protected, secure location and away from drains.
	Store reactive, ignitable, or flammable liquids in compliance with the local fire code.
	Identify potentially hazardous materials, their characteristics, and use.
	Eliminate/reduce exposure to storm water.
	Control excessive purchasing, storage, and handling of potentially hazardous materials.
	Keep records to identify quantity, receipt date, service life, users, and disposal routes.
	Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials.
	Educate personnel for proper storage, use, cleanup, and disposal of materials.
	Maintain good integrity of all storage tanks.
	Inspect storage tanks to detect potential leaks and perform preventive maintenance.
	Provide sufficient containment for outdoor storage areas for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank.

TABLE X–3.—GENERAL STORM WATER BMPS FOR PRINTING AND PUBLISHING FACILITIES[i, ii, iii, iv]—Continued

Activity	Best management practices (BMPs)
	Use temporary containment where required by portable drip pans. Use spill troughs for drums with taps. Train employees on proper filling and transfer procedures. Inspect piping systems (pipes, pumps, flanges, couplings, hoses, valves) for failures or leaks. Handle solvents in designated areas away from drains, ditches, and surface waters. Locate designated areas preferably indoors or under a shed. If spills occur, • Stop the source of the spill immediately. • Contain the liquid until cleanup is complete. • Deploy oil containment booms if the spill may reach the water. • Cover the spill with absorbent material. • Keep the area well ventilated. • Dispose of cleanup materials properly. • Do not use emulsifier or dispersant.

[i] EPA, Pollution Prevention Programs, Opportunities in Printing. Philadelphia, PA. October 1990.
[ii] University of Pittsburgh Trust, Center for Hazardous Materials Research Fact Sheet, Pollution Prevention: Strategies for the Printing Industry.
[iii] EPA, Resource Conservation and Recovery Act (RCRA) document, Does Your Business Produce Hazardous Waste as Many Small Buelnesses Do. Printing and Allied Industries, EPA/530–SW–90–027g, April 15, 1990.
[iv] NPDES Storm Water Group Applications—Part 1. Received by EPA March 18, 1991 through December 31, 1992.

4. Special Conditions

There are no additional requirements under this section other than those stated in VI.B. of today's fact sheet.

5. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from printing and publishing facilities. The requirements included in the pollution prevention plans provide a flexible framework for the development and implementation of site-specific controls to minimize the pollutants in storm water discharges. This flexibility is necessary because each facility is unique in that the source, type, and volume of contaminated storm water discharge will vary from site to site.

Under today's proposed permit, all facilities must prepare and implement a storm water pollution prevention plan. The pollution prevention plan requirement reflects EPA's decision to allow operators of printing and publishing facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The pollution prevention plan requirements in this section are consistent with EPA's storm water general permits finalized on September 9, 1992 (57 FR 41236), and September 25, 1992 (57 FR 44438), for discharges in nonauthorized NPDES States.

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

Specific requirements for a pollution prevention plan for printing and publishing facilities are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

a. Contents of the plan. Storm water pollution prevention plans are intended to aid operators of printing and publishing facilities to evaluate all potential prevention sources at a site, and assist in the selection and implementation of appropriate measures designed to prevent, or control, the discharge of pollutants in storm water runoff. EPA has developed guidance entitled Storm Water Management for Industrial Activities: "Developing Pollution Prevention Plans and Best Management Practices," EPA, 1992, (EPA 832–R–92–006) to assist permittees in developing and implementing pollution prevention measures.

(1) Description of potential pollutant sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute pollutants to storm water runoff or, during periods of dry weather, result in dry weather flows. This assessment of potential storm water pollutant source will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Plans must describe the following elements:

(a) Site map—The plan must contain a map of the site that shows the pattern of storm water drainage, structural and nonstructural features that control pollutants in storm water runoff and process wastewater discharges, surface water bodies (including wetlands), places where significant materials[129] are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map must also indicate the direction of storm water flow. An outline of the drainage area for each outfall must be provided; and the location of each outfall and monitoring points must be indicated. An estimation of the total site acreage utilized for each industrial activity (e.g., storage of raw materials, waste materials, and used equipment) must be provided. These areas include liquid storage tanks, stockpiles, holding bins, used equipment, and empty drum storage. These areas are considered to be significant potential sources of pollutants at printing and publishing facilities.

[129] Significant materials include, "* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; * * * hazardous substances designated under section 101(14) of CERCLA; any chemical facilities are required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge." (40 CFR 122.26(b)(12)). Significant materials commonly found at transportation equipment, industrial or commercial machinery manufacturing facilities include raw and scrap metals; solvents; used equipment; petroleum based products; waste materials or by-products used or created by the facility.

(b) Inventory of exposed materials—Facility operators are required to carefully conduct an inspection of the site to identify significant materials that are or may be exposed to storm water discharges. The inventory must address materials that within 3 years prior to the effective date of this permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with precipitation and runoff; existing structural and nonstructural controls that reduce pollutants in storm water; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or through a separate storm sewer system. The description must be updated whenever there is a significant change in the type or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(c) Significant spills and leaks—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of CWA (see 40 CFR 110.10 and 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

(d) Non-storm water discharges—Each pollution plan must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Pollution prevention plans must identify and ensure the implementation of appropriate pollution prevention measures for any non-storm water discharges.

(e) Sampling data—Any existing data describing the quality or quantity of storm water discharges from the facility must be summarized in the plan. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

(f) Summary of potential pollutant sources—The description of potential pollutant sources should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: raw materials (liquid storage tanks, stockpiles, holding bins), waste materials (empty drum storage), and used equipment storage areas. The assessment must list any significant pollutant parameter(s) (i.e., total suspended solids, oil and grease, etc.) associated with each source.

(2) Measures and controls. Permittees must select, describe, and evaluate the pollution prevention measures, BMPs, and other controls that will be implemented at the facility. Source reduction measures include preventive maintenance, spill prevention, good housekeeping, training, and proper materials management. If source reduction is not an option, EPA supports the use of source control measures. These include BMPs such as material covering, water diversion, and dust control. If source reduction or source control are not available, then recycling or waste treatment are other alternatives. Recycling allows the reuse of storm water, while treatment lowers pollutant concentrations prior to discharge. Since the majority of printing and publishing activities occurs indoors, the BMPs identified above are geared towards only those activities occurring outdoors or otherwise have a potential to contribute pollutants to storm water discharges.

Pollution prevention plans must discuss the reasons each selected control or practice is appropriate for the facility and how each of the potential pollutant sources will be addressed. Plans must identify the time during which controls or practices will be implemented, as well the effect the controls or practices will have on storm water discharges from the site. At a minimum, the measures and controls must address the following components:

(a) Good housekeeping—Permittees must describe protocols established to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. Specifics of this plan must be communicated to appropriate plant personnel.

(b) Preventive maintenance—Permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. Inspections should assess the effectiveness of the storm water pollution prevention plan. They allow facility personnel to monitor the components of the plan on a regular basis. The use of a checklist is encouraged, as it will ensure that all of the appropriate areas are inspected and provide documentation for recordkeeping purposes.

(c) Spill prevention and response procedures—Permittees are required to identify proper material handling procedures, storage requirements, containment or diversion equipment, and spill removal procedures to reduce exposure of spills to storm water discharges. Areas and activities which are high risks for spills at printing and publishing facilities include raw material unloading and product loading areas, material storage areas, and waste management areas. These activities and areas and their drainage points must be described in the plan.

(d) Inspections—Qualified personnel must inspect designated equipment and areas of the facility at the proper intervals specified in the plan. The plan should identify areas which have the potential to pollute storm water for periodic inspections. Records of inspections must be maintained onsite.

(e) Employee training—Permittees must describe a program for informing and educating personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. A schedule for conducting this training should be provided in the plan. Where appropriate, contractor personnel must also be trained in relevant aspects of storm water pollution prevention. Topics for employee training should include good housekeeping, materials management, and spill response procedures.

(f) Recordkeeping and internal reporting procedures—Permittees must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. This includes the success and failure of BMPs implemented at the facility.

(g) Sediment and erosion control—Permittees must identify areas, due to topography, activities, soils, cover materials, or other factors that have a

high potential for soil erosion. Measures to eliminate erosion must be identified in the plan.

(h) Management of runoff—Permittees must provide an assessment of traditional storm water management practices that divert, infiltrate, reuse, or otherwise manage storm water so as to reduce the discharge of pollutants. Based on this assessment, practices to control runoff from these areas must be identified and implemented as required by the plan.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) Confirm the accuracy of the description of potential sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations must be conducted once a year for printing and publishing facilities. The individual(s) who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, never more than 12 weeks after completion of the inspection.

6. Numeric Effluent Limitation

There are no additional requirements under this section other than those stated in Part VI.F. of today's fact sheet.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44 (i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at printing and publishing facilities. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help permittees to determine the effectiveness of their plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for printing and publishing facilities. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.X.7. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees covered by this section must monitor for the storm water parameters identified in Table X–4. Monitoring should occur at least annually (once per year) except as provided in VI.E.7. (Sampling Waiver) and VI.E.6. (Representative Discharge). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE X–4.—STORM WATER DISCHARGE MONITORING REQUIREMENTS INCLUDING PARAMETERS, UNITS, FREQUENCY, AND SAMPLE TYPE

Parameter	Unit	Frequency	Sample type [1]
Total Flow	MGD	1/year	Estimate.
Oil & Grease	mg/L	.....do	Grab.
Total Recoverable Zinc	mg/L	.....do	Do.
Total Suspended Solids (TSS)	mg/L	.....do	Do.
pH	Standard units	.....do	Do.
Total Recoverable Copper	mg/L	.....do	Do.

[1] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

b. Sample type. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Reporting: when to submit. Permittees that are required to conduct sampling pursuant to XI.X.7.a. shall monitor samples collected during the sampling period from January to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. The first report may include less than 12 months of information.

Y. Storm Water Discharges Associated With Industrial Activity From Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

1. Discharges Covered Under This Section

This section covers storm water discharges associated with industrial activity from facilities commonly identified by Standard Industrial Classification (SIC) major groups 30 and 39 (except 391—jewelry, silverware, and plateware).

Major SIC group 30 includes rubber and miscellaneous plastic products. Specifically, this SIC group includes manufacturers of tires and inner tubes, rubber and plastic footwear, rubber and plastic hose and belting, gaskets, packing and sealing devices, and miscellaneous fabricated rubber products. This SIC group also includes miscellaneous plastic products such as unsupported plastic film, sheet, rods and tubes, laminated plastic plate, sheet and profile shapes, plastic pipe and bottles, plastic foam products such as cups, ice chests and packaging materials, plastic plumbing fixtures, and miscellaneous plastic products.

Major SIC group 39 includes miscellaneous manufacturing industries. Specifically, this group includes manufacturers of jewelry and silverware, musical instruments, games, toys and athletic goods, pens, pencils and artists' supplies, buttons, pins and needles, and a wide variety of products not classified elsewhere.

The SIC codes of the facilities covered by this section are in category (xi) of the definition of storm water discharges associated with industrial activity. Storm water discharges from facilities in this category are only regulated where precipitation and storm water runon come into contact with areas associated with industrial activities, and significant materials. Significant materials include, but are not limited to, raw materials, waste products, fuels, finished products, intermediate products, by-products, and other materials associated with industrial activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Pollutants Found in Storm Water Discharges

a. Sources of pollutants. As discussed above, the SICs of the facilities in this sector fall into category (xi) of the definition of "storm water associated with industrial activity" found at 40 Code of Federal Regulations (CFR) 122.26(b)(14). As noted in the preamble to the final storm water regulations of November 16, 1990, most of the actual manufacturing and processing activity at these types of facilities normally occurs indoors (55 FR 48008).

Additional information concerning these manufacturing processes and the industrial sector itself can be found in the following documents:

- "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Tire and Synthetic Rubber Processing Point Source Category," EPA 440/1–74–013a
- "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Fabricated and Reclaimed Rubber Segment of the Rubber Processing Point Source Category," EPA 440/1–74/030a
- "Development Document and Effluent Limitations Guidelines and Standards for the Plastics Molding and Forming Point Source Category," EPA 440/1–84/069.

The types of activities at these facilities where exposure to storm water may occur consist primarily of loading/unloading activities, and the storage and handling of raw materials, by-products, final products or waste products. A wide variety of materials are used at the facilities including solvents, acids and caustic, carbon black, plasticizers, paint, processing oils, resins, rubber compounds and solutions, fuels such as

diesel or gasoline, adhesives, zinc and miscellaneous chemicals. Tanks, drums or bags of these materials may be exposed to storm water during loading/unloading operations, or through outdoor storage or handling at some facilities.

Other items which may be exposed to storm water include surplus processing machinery, scrap metal, scrap plastic and rubber, plastic pellets, PVC pipe and rags. Table Y–1 lists potential pollutant sources from activities that commonly take place at rubber, miscellaneous plastic products, and miscellaneous manufacturing industries.

TABLE Y–1.—COMMON POLLUTANT SOURCES

Activity	Pollutant source	Pollutants
Outdoor material loading/unloading.	wooden pallets, spills/leaks from material handling equipment, solvents, resins.	TSS, oil and grease, organics.
Outdoor material and equipment storage.	solvents, acids and caustic, plasticizers, paint, lubricating oils, processing oils, resins, rubber compounds, mineral spirits, zinc, scrap metal, scrap plastic and rubber, plastic pellets, PVC pipe, and rags.	organics, zinc, hydrocarbons, oil and grease, acids, alkalinity.

b. Storm water monitoring results. Tables Y–2 and Y–3 summarize the storm water monitoring results for the conventional parameters which were reported by facilities in this sector. Table Y–2 provides composite sample data and Table Y–3 provides the grab sample results.

TABLE Y–2.—COMPOSITE SAMPLE RESULTS

Pollutant	Units	No. of samples	Mean	Min	Max	Median	95th perc.	99th perc.
BOD_5	mg/L	89	11.21	0.00	144.0	7.0	34.0	144.0
COD	mg/L	87	72.08	0.00	640.0	43.0	240.0	640.0
$NO_3 + NO_2$ Nitrogen	mg/L	56	1.26	0.00	32.0	0.67	3.56	32.0
Total Kjeldahl Nitrogen	mg/L	85	1.55	0.00	6.54	1.24	4.70	6.54
Total Phosphorus	mg/L	85	0.34	0.00	6.65	0.16	0.83	6.65
TSS	mg/L	87	119.32	0.00	2100.0	30.0	476.0	2100.0

TABLE Y–3.—GRAB SAMPLE RESULTS

Pollutant	Unit	Number of samples	Mean	Min	Max	Median	95th perc.	99th perc.
BOD_5	mg/L	90	13.92	0.000	160.0	7.15	51.0	160.0
COD	mg/L	90	100.0	0.000	812.0	53.0	330.0	812.0
$NO_3 + NO_2$ Nitrogen.	mg/L	89	0.86	0.000	5.23	0.58	2.93	5.23
Total Kjeldahl Nitrogen.	mg/L	89	2.34	0.000	25.0	1.36	6.0	25.0
Oil and grease	mg/L	94	4.28	0.000	91.0	0.50	18.0	91.0
pH	s.u	86	7.17	2.56	10.1	N/A	N/A	N/A
Total phosphorus	mg/L	89	0.41	0.0	6.7	0.190	1.61	6.7
TSS	mg/L	90	188.55	0.000	2008.0	44.0	893.0	2008.0

For most pollutants, the grab samples are somewhat higher than the composite results indicating a moderate "first flush" effect. Overall, the monitoring results indicate wide variability in pollutant concentrations.

EPA also reviewed the monitoring results for nonconventional and priority toxic pollutants required by Parts B and C of Form 2F. Table Y–4 below summarizes the results for parameters where at least some of the reported values exceeded NURP averages and may be a result of industrial activities at the facilities.

TABLE Y–4.—RESULTS FOR NONCONVENTIONAL AND PRIORITY TOXIC POLLUTANTS

Pollutant	Unit	No. of obs./ detects grab samples	Range grab samples	No. of obs./ detects composite samples	Range composite samples	Range NURP
1,1,1 Tri-chloroethane	mg/L	5/1	0.00–0.38	50/0	0	.016–1.0
Methylene Chloride	mg/L	9/4	0.00–13.0	9/5	0.00–11.0	.05–.145
Toluene	mg/L	11/1	0.00–0.70	12/1	00.0–3.8	.03–.09
Zinc	mg/L	32/32	0.027–7.60	32/32	0.011–7.49	.1–24

EPA contacted certain group members to try to determine more specifically the possible sources of the pollutants reported above. The elevated levels of zinc were detected primarily from storm water samples taken at rubber manufacturing facilities which use large amounts of zinc oxide in the production of rubber. Zinc oxide is used as a vulcanization accelerator and also retards the aging of rubber. Zinc stearate is also used at some facilities as a coating material to prevent sticking between rubber materials.

The elevated levels of methylene chloride were reported by certain manufacturers of polyurethane plastic foam products. Methylene chloride is widely used in this industry as a substitute blowing agent for freon. This material is handled and stored outside at some facilities, and the sampling results would appear to be related to these activities.

The elevated readings for 1,1,1 trichloroethane were also reported by a manufacturer of polyurethane plastic foam products. These results were obtained from storm water samples taken at an outfall downstream from off-loading areas for this material and from areas where tanks of the material are stored outdoors.

Elevated levels of toluene were reported by a manufacturer of the laminated film products. For this case, the results were thought to stem from leaks or drips from the carbon adsorption system which is used to remove toluene from solvent laden air. A rubber manufacturer also reported a detection of toluene in storm water runoff. For this case, the result was thought to be associated with the outdoor handling of containers of toluene which is used in the rubber manufacturing process.

Facilities in this sector utilize and conducted sampling for a wide variety of nonconventional and priority toxic pollutants in addition than those listed above. While the sampling results did not indicate any special concerns with regards to other pollutants, it should be noted that the above results are based on the limited sampling activity required by the group application regulations (40 CFR 122.26(c)(2)). Therefore, it would be premature to conclude that the above pollutants are the only pollutants which could ever be present at or above benchmark levels in the storm water discharges from facilities in this sector.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology)]. The Agency does not believe that it is appropriate to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from rubber, miscellaneous plastic products and miscellaneous manufacturing industries to meet BAT/BCT standards of the Clean Water Act. Instead, this section establishes requirements for the development and implementation of site specific storm water pollution prevention plans consisting of a set of Best Management Practices (BMPs) that are sufficiently flexible to address different sources of pollutants at different sites.

Certain BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges. The types of BMPs implemented will depend on the type of discharge, types and concentrations of contaminants, and the volume of the flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with rubber, miscellaneous plastic products and miscellaneous manufacturing industries.

Part 1 group application data indicated that the most widely implemented BMP, used by approximately 36 percent of the sampling facilities, are dikes. Less than 10 percent of the sampling subgroup reported that they cover their storage or loading areas; approximately 12 percent have roofs over their raw materials; and less than 5 percent store raw materials indoors. Because BMPs described in part 1 data are limited, the Table Y–5 is provided to identify BMPs associated with activities that routinely occur at rubber, miscellaneous plastic products and miscellaneous manufacturing industries.

TABLE Y–5.—GENERAL STORM WATER BMPS FOR RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES

Activity	Best management practices (BMPs)
Outdoor unloading and loading.	Confine loading/unloading activities to a designated area. Consider performing loading/unloading activities indoors or in a covered area. Consider covering loading/unloading area with permanent cover (e.g., roofs) or temporary cover (e.g., tarps). Close storm drains during loading/unloading activities in surrounding areas. Avoid loading/unloading materials in the rain. Inspect the unloading/loading areas to detect problems before they occur. Inspect all containers prior to loading/unloading of any raw or spent materials. Consider berming, curbing, or diking loading/unloading areas. Dead-end sump where spilled materials could be directed. Drip pans under hoses. Use dry clean-up methods instead of washing the areas down. Train employees on proper loading/unloading techniques and spill prevention and response.
Outdoor Material Storage (including waste, and particulate emission management).	Confine storage of materials, parts, and equipment to designated areas. Consider secondary containment using curbing, berming, or diking all liquid storage areas. Train employees on proper waste control and disposal. Train employees in spill prevention and response. Consider covering tanks. Ensure that all containers are closed (e.g., valves shut, lids sealed, caps closed). Wash and rinse containers indoors before storing them outdoors. If outside or in covered areas, minimize runon of storm water by grading the land to divert flow away from containers. Leak detection and container integrity testing. Direct runoff to onsite retention pond.

TABLE Y–5.—GENERAL STORM WATER BMPS FOR RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES—Continued

Activity	Best management practices (BMPs)
	Inventory all raw and spent materials. Clean around vents and stacks. Place tubs around vents and stacks to collect particulate. Inspect air emission control systems (e.g., baghouses) regularly, and repair or replace when necessary. Store wastes in covered, leak proof containers (e.g., dumpsters, drums). Consider shipping all wastes to offsite landfills or treatment facilities. Ensure hazardous waste disposal practices are performed in accordance Federal, State, and local requirements.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991, through December 31, 1992.

EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

There are three major types of facilities in this sector: (1) Rubber manufacturers, (2) manufacturers of miscellaneous plastic products, and (3) miscellaneous industries. In discussions with the rubber industry, the BMPs found in Table Y–6 were identified for rubber manufacturing to control discharges of zinc which was the most frequently reported toxic pollutant in the storm water sampling data:

TABLE Y–6.—BMPS FOR THE CONTROL OF ZINC AT RUBBER MANUFACTURERS

Zinc source	BMPs
Poor housekeeping, bags of zinc stored outside, zinc spilled from trucks during unloading, spillage during emptying for plant use.	Employee training, spill cleanup, indoor storage, use of special large volume sacks with less potential for releases of zinc.
Zinc containers, rubber products, rags contaminated with zinc stearate discarded in outdoor dumpsters.	Cover the dumpsters, use linked dumpsters which do not leak or move dumpster inside.
Malfunctioning baghouses for dust collection.	Repair or replace the baghouse, regular maintenance.
Grinding operations from which zinc dust may be released.	Use dust collection system or reduce the amount of dust generated.
Drips of zinc stearate during coating operations.	Spill prevention/response, use of alternate compounds.

4. Special Conditions

There are no additional requirements under this section other than those stated in the general fact sheet language.

5. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from rubber, miscellaneous plastic products, and miscellaneous manufacturing industries. The requirements included in the pollution prevention plans provide a flexible framework for the development and implementation of site-specific controls to minimize the pollutants in storm water discharges. This flexibility is necessary because each facility is unique in that the source, type, and volume of contaminated storm water discharge will vary from site to site.

Under today's proposed permit, all facilities must prepare and implement a storm water pollution prevention plan. The pollution prevention plan requirement reflects EPA's decision to allow operators of rubber, miscellaneous plastic products, and miscellaneous manufacturing industries to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The pollution prevention plan requirements in this section are consistent with EPA's storm water general permits finalized on September 9, 1992 (57 FR 41236), and September 25, 1992 (57 FR 44438), for discharges in nonauthorized NPDES States.

There are two major objectives to a pollution prevention plan: (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges

associated with industrial activity from a facility.

Section 313 of EPCRA requires operators of manufacturing facilities that handle toxic chemicals in amounts exceeding threshold levels (listed at 40 CFR 372.25) to report to the Government on an annual basis. Because these types of facilities handle large amounts of toxic chemicals, EPA concluded that they have the increased potential to degrade the water quality of receiving streams. Consistent with Part VII.B. of this permit, Section 313 reporting facilities must fulfill specific requirements.

Except for the special controls discussed below for rubber manufacturers, there are no additional Pollution Prevention Plan requirements other than those stated in the multi-sector fact sheet language in Part VI.C.

a. Special measures and controls for rubber manufacturing facilities. For rubber manufacturers, this section also requires permittees to develop specific BMPs to control discharges of zinc in storm water runoff. The principal sources of zinc in storm water runoff at these facilities were identified above in Section 3. This section requires that rubber manufacturers review the possible sources of zinc listed below at their facilities and include as appropriate the accompanying BMPs in their storm water pollution prevention plans:

(1) Inadequate housekeeping. Permittees are required to review the handling and storage of zinc bags at their facilities. The following BMPs must be considered in developing the storm water pollution prevention plan: employee training regarding the handling and emptying of zinc bags, indoor storage of zinc bags, thorough cleanup of zinc spills without washing the zinc into a storm drain. Facilities must also consider the use of 2,500 pound sacks (from which spills are less likely) rather than 50 to 100 pound sacks.

(2) Zinc in dumpsters. The following BMPs must be considered to reduce this potential source of zinc: provide a cover for the dumpster or move the dumpster inside; provide a lining for the dumpster.

(3) Malfunctioning dust collectors or baghouses. Permittees must review dust collectors and baghouses as possible sources of zinc. Improperly operating dust collectors or baghouses must be replaced or repaired as appropriate; the plan must also provide for regular maintenance of these facilities.

(4) Grinding operations. Permittees must review dust generation from rubber grinding operations at their facility and as appropriate, install a dust collection system.

(5) Zinc stearate coating operations. The plan must include measures to prevent and/or clean up drips or spills of zinc stearate slurry which may be released to a storm drain. Alternate compounds to zinc stearate must also be considered.

6. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those described in Part VI.F.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44 (i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at rubber, miscellaneous plastic products, and miscellaneous manufacturing industries. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for rubber, miscellaneous plastic products, and miscellaneous manufacturing industries. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring

requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

b. Baseline general permit variance. On September 9, 1992, and September 25, 1992, EPA published the Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity. These notices set out requirements for semiannual monitoring for several parameters for discharges from rubber, miscellaneous plastic products, and miscellaneous manufacturing facilities. These notices specifically require that facilities with storm water discharges that are associated with rubber, miscellaneous plastic products, and miscellaneous manufacturing industries are required to monitor certain storm water discharges for oil and grease, COD, TSS, and pH. Today's proposed permit contains different monitoring requirements. EPA requests comment upon the difference between the monitoring requirements set out for rubber, miscellaneous plastic products, and miscellaneous manufacturing facilities in the September 1992 General Permits and those required in today's proposed permit.

8. Alternative Monitoring Requirements

EPA also requests comment upon the following monitoring and reporting requirements in lieu of those discussed above in Part VIII.Y.7.a. of today's proposed fact sheet.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit and except as provided under Section VI.E.3., 6, or 7. (Sampling Waiver, Representative Discharge, and Alternative Certification) of the permit or Section VIII.Y.8.d. below, permittees with facilities covered under this section of the permit shall monitor storm water discharges associated with industrial activity once per year for the following pollutants:

- Zinc (for rubber manufacturers only)
- Oil and grease, COD, TSS, pH; and
- Any additional water priority chemical which the permittee, upon review of the Description of Potential Pollutant Sources (Section VI.C.2. above), may be present in storm water discharges in significant quantities.

Permittees must retain monitoring results in accordance with Part VI.E. (Retention of Records). In addition to the parameters specified above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

b. Sample type. All samples shall be collected as grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Exemptions from storm water monitoring. Storm water monitoring may be discontinued on a pollutant-by-pollutant basis for the pollutants specified in Section VIII.Y.8.a. above if two successive samples indicate that a particular pollutant is not present in significant quantities. Monitoring may be discontinued entirely if two successive samples indicate that no pollutants are found in significant quantities.

d. Quarterly visual examination of storm water runoff. (1) On a quarterly basis, permittees shall conduct a visual examination of storm water discharges from each outfall which discharges storm water associated with industrial activity. If the facility has two or more outfalls with substantially identical effluents (based on a consideration of industrial activity, significant materials, and management practices and activities in the area drained by the outfall), the visual examination may be conducted on only one such outfall.

(2) The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff event. Examinations shall be conducted in each of the following periods for purposes of inspecting storm water quality associated with storm water runoff and snow-melt: December to February (storm water runoff or snow-melt); March to May (storm water runoff); June to August (storm runoff); and September to November (storm water runoff or snow-melt). February (storm water runoff or snow-melt; March to May (storm water runoff); June to August (storm runoff); and September to November (storm water runoff or snow-melt).

(3) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen or other obvious indications of storm water pollution. No analytical tests are required to be performed. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information must be maintained on site and include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

Z. Storm Water Discharges Associated With Industrial Activity From Leather Tanning and Finishing Facilities

1. Discharges Covered Under This Section

Storm water discharges covered by this section include all discharges from leather tanning facilities, commonly identified by Standard Industrial Classification (SIC) code 3111 and facilities which make fertilizer solely from leather scraps and leather dust where precipitation and storm water runon come into contact with significant materials including, but not limited to, raw materials, waste products, by-products, stored materials, and fuels. This includes storm water discharges from access roads, and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products created by the facility. This section does not cover any discharge subject to process wastewater effluent limitation guidelines, including storm water that combines with process wastewater. Storm water that does not come into contact with any overburden, raw material, intermediate product, finished product, by-product or waste product located on the site of the operation are not subject to permitting under this section according to 402(1)(2) of the Clean Water Act (CWA).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the

other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

a. Industry profile. The storm water permit application regulations define storm water discharge associated with industrial activity at 40 Code of Federal Regulations (CFR) 122.26(b)(14). Category (ii) of this definition includes facilities identified by SIC code 3111, establishments primarily engaged in tanning, currying, and finishing hides and skins into leather. Most tanneries are small family operations, although several are divisions of larger corporations. The leather tanning and finishing industry currently includes approximately one hundred fifty facilities. There are effluent limitations guidelines for the leather tanning industry based on 9 subcategories, as described in the "Development Document for Effluent Limitations Guidelines and Standards for Leather Tanning and Finishing Point Source Category." (The subcategories were based on distinct combinations of raw materials and leather processing operations.)

Leather tanning or finishing is the conversion of animal hides or skins into leather. Leather is made from the inner layer of the animal skin, which consists primarily of the protein collagen. Tanning is the reaction of the collagen fibers with tannins, chromium, alum or other tanning agents. Tanning processes use sodium dichromate, sulfuric acid and detergents and a variety of raw and intermediate materials.

There are three major processes required to make finished leather. These are beamhouse operations, tanyard processes and retanning and finishing processes. In general, most tanneries perform the entire tanning process, from beamhouse to wet finishing operations. A smaller number perform only beamhouse and tanyard operations and sell their unfinished product (wet "blue" stock) to other tanneries. These processes are described below:

• *Beamhouse Operations*—These consist of four activities: side and trim; soak and wash; fleshing and unhairing. Side and trim is the cutting of the hide into two sides and trimming of areas which do not produce good leather. In soak and wash processes, the hides are soaked in water to restore moisture lost during curing. Washing removes dirt, salt, blood, manure, and nonfibrous proteins. Fleshing is a mechanical operation which removes excess flesh. The removed matter is normally recovered and sold for conversion to glue. Unhairing involves using calcium hydroxide, sodium sulfhydrate, and sodium sulfide to destroy the hair (hair pulp process) or remove hair roots. A mechanical unhairing machine can also be used to remove hair loosened by chemicals (hair save process). Beamhouse processes can account for approximately 60 percent of the pollutant load (except chromium) from a complete tannery. Pollutants that may be produced are proteinaceous organic and inorganic pollutants characterized by a high pH (10–12) and substantial amounts of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Kjeldahl Nitrogen (TKN), and sulfides.

• *Tanyard Processes*—These consist of bating, pickling, tanning, wringing, splitting, and shaving. Bating involves the addition of salts of ammonium sulfate or ammonium chloride used to convert the residual alkaline chemicals present from the unhairing process into soluble compounds which can be washed from the hides or skins. "Pickling" the hide with sulfuric acid provides the acid environment necessary for chromium tanning. In the tanning process, tanning agents such as trivalent chromium and vegetable tannins convert the hide into a stable product which resists decomposition. Wringing of the "blue hides" (hides tanned with chromium) removes excess moisture with a machine similar to a clothes wringer. Splitting adjusts the thickness of the tanned hide to the requirements of the finished product and produces a "split" from the flesh side of the hide. The hide is then shaved to remove any remaining fleshy matter. Wastewater from tanyard operations contain inorganic chemical salts, small amounts of proteinaceous hair and waste, and large amounts of ammonia from the bating process. Pickling generates a highly acidic waste (pH of 2.5–3.5) which contains salt. Spent chromium liquors contain high concentrations of trivalent chromium in acid solution with low concentrations of BOD and TSS. Vegetable tanning vat discharges are highly colored, and contain significant amounts of BOD, COD, and dissolved solids.

• *Retanning and Wet Finishing Processes*—These include retanning, bleaching, coloring, fatliquoring, and finishing. The most common retanning agents are chromium, vegetable extracts and syntans (based upon naphthalene and phenol). Sodium bicarbonate and sulfuric acid are sometimes used to bleach leather. Coloring involves the use of dyes (usually aniline based) on the tanned skin. Animal or vegetable fatliquors are added to replace the natural oils lost in the beamhouse and tanyard processes. Finishing includes all operations performed on the hide after fatliquoring, and includes finishing to enhance color and resistance to stains and abrasions, smoothing and stretching of the skin, drying, conditioning, staking, dry milling, buffing and plating. These processes generate wastes with additional quantities of trivalent chromium, tannins, sulfonated oils, and spent dyes, which are low in BOD and TSS, and high in COD.

Table Z–1 lists potential storm water pollutant source activities that may take place at leather tanning facilities.

TABLE Z–1.—POLLUTANTS POTENTIALLY FOUND IN STORM WATER DISCHARGES AT LEATHER TANNING FACILITIES

Activity	Pollutant source	Pollutant
Outdoor storage of fresh and brine cured hides	fresh and brine cured hides	salt, organic materials (manure), biochemical oxygen demand.
Beamhouse processes (trimming, soak and wash, fleshing, unhairing).	chemical storage (drums or bags).	depilatory chemicals.
	empty containers of lime, depilatory chemicals.	calcium hydroxide, sodium sulfhydrate, or sodium sulfide.
	trim scraps, hair	BOD, COD, TSS.

TABLE Z–1.—POLLUTANTS POTENTIALLY FOUND IN STORM WATER DISCHARGES AT LEATHER TANNING FACILITIES—Continued

Activity	Pollutant source	Pollutant
Tanyards (bating, pickling, tanning, wringing, splitting, shaving).	empty chemical containers	trivalent chromium, vegetable tannins, enzymes, pickling acids (sulfuric acid), alum, syntans, chemical deliming agents, formaldehyde, gluteraldehyde, heavy oils.
	"blue" hides, splits, trimmings, shavings.	trivalent chromium, leather fiber and dust, suspended solids.
Retan and wet finishing (retanning, bleaching and coloring, fatliquoring, buffing).	empty chemical containers	chromium tanning agents, vegetable extract, dyes, pigments, animal or vegetable based oils, synthetic oils made from modified mineral based oils.
	leather dust containing chromium.	leather fiber, chromium, suspended solids.
Dry finishing (Application of pigment to leather surface with water-based or solvent based finishes).	emissions from spray booths and spent solvents.	pigments, solvents-acetone, pylene, glycol ether.
Receiving and unloading areas	hides	chromium, salt.
	chemical supplies	depilatory chemicals, trivalent chromium, vegetable tannins, enzymes, pickling acids (sulfuric acid), alum, syntans, chemical deliming agents, formaldehyde, gluteraldehyde, heavy oils, dyes, pigments, animal or vegetable based oils, synthetic oils, solvents and biocides.
	leaking truck	Soil and grease and waste materials.
	accidental spills	chemicals listed for supplies above.
Improper connections to storm sewer	floor drains-process wastewater, cleaning and washdown of process equipment and process areas.	dependent on operations.
Outdoor bulk chemical storage	above ground tanks	sulfuric acid, ferric chloride, finishing solvents (mineral spirits), hydrated lime, surfactant.
Outdoor storage of coal	coal piles	oil and grease, TSS, copper, nickel, zinc.
Waste management	hoppers	leather dust, scraps.
	dumpsters	empty bags and chemical containers.
	sludge (wastewater treatment sludge stored in containers to diminish storm water contact, awaiting offsite disposal).	lime, pieces of leather, hair, protein-like substances, floor sweepings, trivalent chromium, biochemical oxygen demand.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA May 22, 1991—February 18, 1992.

EPA, Office of Water. November 1982. "Development Document for Effluent Limitations Guidelines and Standards for the Leather Tanning and Finishing Point Source Category." EPA/440/1–82/016.

EPA, Office of Water Regulations and Standards and Office of Water Enforcement and Permits. September 1986. "Guidance Manual for Leather Tanning and Finishing Pretreatment Standards."

EPA, Office of Solid Waste Management Programs, SCS Engineers, Reston, VA. 1976. "Assessment of Industrial Hazardous Waste Practices. Leather Tanning and Finishing Industry." EPA–68–01–3261.

2. Special Conditions

There are no additional requirements beyond those described in Part VI.B. of this fact sheet.

3. Pollutants Found in Storm Water Discharges From Leather Tanning Operations

The impacts caused by storm water discharges from leather tanning facilities will depend on the geographic location of the facility, the types of industrial activities occurring onsite (e.g., beamhouse, tanyard, retan and wet finishing, dry finishing); the types of significant materials exposed to storm water (e.g., chromium tanned leather shavings, chemical containers etc.), the size of the operation; and the type, duration, and intensity of precipitation events. Other factors such as air emissions (i.e., settled dust), materials storage, spills, improperly dumped materials, and illicit conditions may also impact receiving waters. (Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers.)

Part 1 group application information indicates that the industrial activities occurring at leather tanning facilities include leather tanning plant yards; unhairing (76.9 percent of samplers); chromium tanning (69.2 percent of samplers); splitting and shaving (76.9 percent) retanning (69.2 percent); wet hide finishing-buffing (76.9 percent); dry finishing; vegetable tanning (30.8 percent); immediate access roads and rail lines used or traveled by carriers of raw materials (38.5 percent of samplers), manufactured products, waste management (36.8 percent); material handling sites (23.1 percent); refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR part 401) sites used for residual treatment, storage or disposal (waste water treatment (30.8 percent); shipping and receiving areas (69.2 percent of samplers); finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. (40 CFR 122.26(b)(14).

Significant materials include raw materials, brine or salt cured hides and skins (7.7 percent), fuels (15.4 percent), materials such as solvents, detergents, finished materials; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), any chemical required to be reported pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act; fertilizers; pesticides; and waste products such as sludge (7.7 percent) that have the

potential to be released with storm water discharge. (40 CFR 122.26(b)(12)). Other significant materials found at leather tanning facilities include leather shavings and dust (46.2 percent), leather scrap (30.8 percent), blue hides and splits (46.2 percent), empty chemical containers, spent solvents, emissions from spray booths, and wastes in dumpsters. Significant materials produced from various industrial activities occurring at leather tanning facilities are summarized in Table Z–1.

EPA has received part 2 storm water discharge data from all of the 12 designated samplers under part 2 of the group application process. All part 2 data submittals list roof/pavement runoff as the pollutant source. After review of part 1 information and the Development Document for Effluent Limitation Guidelines, EPA has identified potential storm water pollutants and sources resulting from various leather tanning activities. BOD, COD, TSS, and chromium are pollutants of concern.

When all the part 2 data was compiled, large variations in the minimum and maximum values were found for each of the conventional pollutants.

- Grab sample values for total suspended solids ranged from 0 milligrams per liter (mg/L) to 4,000 mg/L and flow weighted composite samples ranged from 0 mg/L to 670 mg/L.
- Grab sample values for COD ranged from 0 mg/L to 2,100 mg/L and flow weighted composite samples ranged from 0 mg/L to 460 mg/L.
- Grab samples for oil and grease ranged from 0 mg/L to 130 mg/L.

Table Z–2 indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles and the total number of data submittals for each of the conventional pollutants. In most cases the mean values for the grab samples were higher than the mean values for composite samples.

TABLE Z–2.—STATISTICS FOR CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS FOR LEATHER TANNING FACILITIES[1] (MG/L EXCEPT AS NOTED)

Pollutant	Number of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp[2]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	31	31	33.1	22.3	0.0	0.0	320.0	92.0	11.0	10.0	140.0	77.0	320.0	92.0
COD	31	31	205.5	91.9	0.0	0.0	2100.0	460.0	82.0	50.0	900.0	340.0	2100.0	460.0
Nitrate Nitrite Nitrogen	31	31	1.86	1.88	0.06	0.300	11.00	9.60	1.200	0.900	4.70	9.10	11.00	9.60
Total Kjeldahl Nitrogen	31	31	7.70	6.22	0.70	0.900	46.00	38.00	4.300	3.500	22.00	15.00	46.00	38.00
Oil and grease	31	3	13.87	N/A	0.00	N/A	130.00	N/A	0.000	N/A	120.00	N/A	130.00	N/A
pH (s.u.)	31	N/A	N/A	N/A	4.60	N/A	9.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	31	31	0.36	0.83	0.00	0.030	3.00	18.00	0.160	0.180	1.60	1.30	3.00	18.00
Total suspended solids	31	31	310	114.81	0	0.00	04000	670.00	49	86.000	1300	460.00	4000	670.00
Aluminum	7	7	2.2	0.3	0.31	0.8	4.9	6.2	2.2	2.3	4.9	6.2	4.9	6.2
Manganese	5	5	0.05	0.09	0.0	0.0	0.15	0.18	0.0	0.09	0.15	0.18	0.15	0.18

[1] Applicants that did not report the units of measurement for the reported values of pollutants were not included in these statistics.
[2] Composite samples.

All facilities submitted data for chromium, indicating that facilities expect chromium to be present. Concentrations of chromium ranged from .0100 mg/L to 5.7 mg/L.

Materials management practices are used to reduce the contact of precipitation and storm water runon with significant materials, or to reduce the offsite discharge of contaminants. Part 1 group application data indicate that storm water management practices currently used at leather tanning facilities include berms/dikes (23.1 percent of samplers), drums, containers, roofing/covers, indoor storage of equipment and treatment (detention ponds (15.4 percent)).

Sources of pollutants of concern and effects on water bodies from these pollutants are summarized as follows:

• *Total Chromium*—Chromium compounds are used extensively throughout the leather tanning industry and is the most prevalent toxic pollutant found in wastewaters in this industry. At least 80 percent of all leather is chromium tanned. The chemistry of chromium is very complex, with interferences from complexing mechanisms, such as chelation by organic matter and dissolution due to presence of carbonates. The limited data submitted with part 2 of the application process indicate a range of 0.011 mg/L to 0.9600 mg/L for the composite samples and a wider range of 0.0100 mg/L to 5.7 mg/L for grab samples. As a comparison, values for chromium from National Urban Runoff Program (NURP) data ranged from 1–190 micrograms per liter (µg/L). EPA Water Quality Criteria for trivalent chromium are 1700 µg/L for fresh water aquatic life and 170,000 µg/L for human health. When the human health water quality criteria were recalculated using Integrated Risk Information System data, this value became 33,000 µg/L.

• *Biochemical Oxygen Demand*—BOD is the quantity of oxygen required for the biological and chemical oxidation of waterborne substances under ambient conditions. The BOD test is used widely to estimate the oxygen requirements of discharged domestic and industrial wastes. Specific chemical test methods are not readily available for measuring the quantity of many degradable substances and their reaction products. In such cases, testing relies on the collective parameter, Five-day BOD (BOD_5). The BOD_5 of a waste adversely affects the dissolved oxygen resources of a body of water by reducing the oxygen available to fish, plant life, and other aquatic species. Water with a high BOD indicates the presence of decomposing organic matter and associated increased bacterial concentrations that degrade its quality and potential uses. In most leather tanning facilities, the storm water runoff BOD_5 will result from organic materials, such as dissolved or pulped hair and other extraneous hide substances, and from ammonia which is derived from residual bating chemicals and from hydrolytic deamination of proteinaceous hair and hide substance. Part 2 data for BOD showed ranges of 0 to 92.0 mg/L for composite samples and 0.0 to 320 mg/L for grab samples. As a comparison NURP BOD values, for average residential or commercial site concentrations were 12 mg/L.

• *Total Suspended Solids*—Suspended solids include both organic and inorganic materials. The inorganic compounds include sand, silt, clay, and toxic metals. The organic fraction includes such materials as grease, oil, animal and vegetable waste products, and adsorbed toxic organic pollutants. Solids may be inert, slowly biodegradable materials, or rapidly decomposable substances. While in suspension they increase the turbidity of the water, reduce light penetration, and impair the photosynthetic activity of aquatic plants. Aside from any toxic effect attributable to substances leached out by water, suspended solids may kill fish and shellfish by causing abrasive injuries, clogging gills and respiratory passages, screening out light, and by promoting and maintaining the development of noxious conditions through oxygen depletion. Suspended solids also reduce the recreational value of the water. Materials which may contribute to TSS are leather scraps and dust, and hair. Part 2 data for TSS show a wide range of 0–670 mg/L for the composite samples and 0–4000 mg/L for grab samples. As a comparison NURP TSS values, for average residential or commercial site concentrations were 239 mg/L.

• *Chemical Oxygen Demand*—The COD test measures those pollutants resistant to biological oxidation in addition to the ones measured by the BOD_5 test. COD is therefore a more inclusive measure of oxygen demand than is BOD_5 and results in higher oxygen demand values than the BOD_5 test. The compounds which are more resistant to biological oxidation are becoming of greater concern, not only because of their slow but continuing oxygen demand on the resources of the receiving water, but also because of their potential health effects on aquatic and human life. Concern about these compounds has increased as a result of demonstrations that their long life in receiving waters allows them to contaminate downstream water intakes. Substances which could contribute to high COD concentrations in storm water discharges are extraneous hide substances, complex organic and inorganic process chemicals, dyes, and vegetable tannins. Part 2 COD data shows wide ranges of 0 to 460 mg/L for the composite sample and 0 to 2100 mg/L for the grab samples. As a comparison NURP COD values, for average residential or commercial site concentrations were 94 mg/L.

• *Nitrate Plus Nitrite Nitrogen*—Ammonia in the presence of dissolved oxygen, is converted to nitrate (NO_3) by nitrifying bacteria. EPA considers nitrates to be among the objectionable components of mineralized waters. Excess nitrates irritate the gastrointestinal tract, causing diarrhea and diuresis. Methemoglobinemia, a condition characterized by cyanosis and resulting in infant and animal deaths, can be caused by high nitrate concentrations in drinking waters. Nitrite (NO_2) which is an intermediate product between ammonia and nitrate, sometimes occurs in quantity when depressed oxygen conditions permit. Part 2 data showed values for nitrate plus nitrite nitrogen which ranged from 0.3 to 9.60 mg/L for composite samples and .06 to 11 mg/L for the grab samples. As a comparison NURP values, for average residential or commercial site concentrations were 1.37 mg/L.

• *Total Kjeldahl Nitrogen*—TKN is a measure of the ammonia nitrogen plus organic nitrogen in wastewater. Organic nitrogen (as measured approximately by TKN minus ammonia) is derived primarily from dissolved or pulped proteinaceous hair removed from hides. Biological deamination and hydrolysis of this organic nitrogen during biological treatment yields another significant source of ammonia. Hence, TKN measures the major nitrogen impact upon a receiving water and is an important measure, in addition to ammonia of the potential environmental impact of nitrogen contained in tannery storm water. Part 2 TKN data showed a range of 0.9 to 38.0 mg/L for composite samples and 0.7 to 46.0 mg/L for grab samples. As a comparison NURP TKN values, for average residential or commercial site concentrations were 2.3 mg/L.

• *pH*—The hydrogen ion concentration in an aqueous solution is represented by pH. The pH scale ranges from zero to fourteen. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions. The pH level is easily measured and is an indication of potential environmental impacts. Storm water discharges with pH values

markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change. Data submitted for part 2 of the application indicate that pH varies from 4.8 to 9.1 standard units. Some of the samples were outside the permitted range for wastewater discharges under the effluent limitation guidelines (pH 6–9), however, most samples submitted to EPA were within the 6.0 to 9.0 range.

• *Oil and Grease*—Sources of oil and grease from leather tanning facilities include degreasing processes, vehicle maintenance and oils used in leather processing (fatliquoring). Oil and grease emulsions are detrimental to aquatic organisms and inhabitants because depositions of oil and grease can impact the aquatic food chain by inhibiting normal benthic growths; destroy algae or other plankton; adhere to the gills of fish; and damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. Part 2 data indicate that oil and grease varies in grab samples from 0.0 to 130.0 mg/L.

• *Total Phosphorus*—Total phosphorus is comprised of dissolved and suspended phosphorus. Phosphorus occurs in natural waters and wastewaters almost exclusively as phosphates. Phosphates are found in bottom sediments and in biological sludge. Phosphorus is essential to the growth of organisms and can be the nutrient that limits the primary productivity of a body of water. In instances were phosphate is a growth limiting nutrient, the discharge of raw or untreated wastewater, agricultural drainage, or certain industrial wastes to that water may stimulate the growth of photosynthetic aquatic organisms in nuisance quantities. Values for phosphorus ranged from a minimum of 0 mg/L to 3.0 mg/L for grab samples and 0.030 mg/L to 18.0 mg/L for composite samples. As a comparison NURP phosphorus values, for average residential or commercial site concentrations were 0.5 mg/L.

Table Z–3 lists the potential pollutant sources for each of the parameters discussed.

TABLE Z–3.—LIST OF POTENTIAL POLLUTANT SOURCES

Parameter	Pollutant sources
Oil and Grease.	Degreasing processes, oils used in leather processing (fatliquoring).
COD	Complex organic and inorganic process chemicals, dyes, vegetable tannins, extraneous hide substances.
BOD_5	Carbonaceous organic materials such as dissolved or pulped hair and other extraneous hide substances, nitrites, ammonia from residual bating chemicals and from hydrolytic deamination of proteinaceous hair and hide substances.
pH	Acidic or alkaline materials.
TSS	Leather dust, scraps, hair.
Total phosphorus.	Detergents.
Nitrate nitrite nitrogen.	Spent bating liquors and breakdown of organic proteins (dissolved hair and dermal matter).
Total Kjeldahl nitrogen.	Dissolved or pulped proteinaceous hair.
Chromium	Blue hides, leather scraps and dust, waste materials such as empty containers, sludge.

4. Options for Controlling Pollutants

The measures implemented to reduce pollutants in storm water associated with leather tanning operations are generally uncomplicated practices. The following table identifies Best Management Practices (BMPs) associated with different activities that take place at leather tanning facilities. The most effective BMPs will be selected on the basis of site-specific considerations (e.g., facility size, industrial processes performed geographic location, significant materials, volume and type of discharge generated). Because of the industrial processes involved in leather tanning, BMPs that concentrate on source reduction, recycling and containment/diversion will be the most helpful for reducing pollution in storm water runoff.

Source reduction BMPs include good housekeeping, materials management practices, preventive maintenance, spill prevention and response activities and employee training. Activities associated with good housekeeping include:

• *Operation and Maintenance*—Keep floors clean and dry, regularly pick up garbage and waste materials, make sure equipment is working properly, routinely inspect for leaks or conditions that could lead to discharges of chemicals or contact of storm water with raw materials, intermediate materials, waste materials etc., reduce chemical spills resulting from carelessness and prepare program to control spills and carry out cleanups. Ensure that spill cleanup procedures are understood by employees. Eliminate unnecessary uses of water such as leaving hoses running.

• *Materials Storage and Maintenance*—Store containers away from direct traffic routes to prevent accidental spills, stack containers according to manufacturers instructions to avoid damaging containers, store containers on pallets to prevent corrosion of containers, assign responsibility of hazardous material inventories to a limited number of people who are trained to handle hazardous materials.

• *Material Inventory Procedures*—Identify all chemical substances present in the work place, label all containers, clearly mark on the inventory hazardous materials that require special handling, storage or use.

• *Preventive Maintenance*—Identify equipment, systems and facility areas that should be inspected, schedule periodic inspections of the equipment and systems, timely adjustments, repair, or replacement of equipment and systems. Maintain complete records on inspections, equipment, and systems. Install automatic monitoring devices to detect abnormal discharge of gases and hazardous substances.

Containment/diversion BMPs involve segregating areas of concern by covering or berming the activity and controlling dust. Diversion dikes, curbs and berms are temporary or permanent diversion structures that prevent runoff from passing beyond a certain point, and divert runoff away from its intended path. Dikes, curbs and berms are already in use at some leather tanning facilities.

Part 1 group application data indicate that BMPs have not been widely implemented at the representative sampling facilities. The most commonly listed material management practice is roofing and covers. Table Z–4 lists BMPs associated with different activities that take place at leather tanning facilities.

TABLE Z–4.—LIST OF BEST MANAGEMENT PRACTICES

Activity	Best management practices
Temporary outdoor storage of fresh or brine cured hides.	Store hides indoors if possible.
	Cover the hides with a roof or temporary covering (e.g., polyethylene, tarpaulin etc.).
	Minimize storm water runon by enclosing the area or building a berm around the area.
	Inspect area regularly for proper implementation of good housekeeping and control measures.
Beamhouse operations	Store chemical drums and bags and empty lime and depilatory chemical containers indoors if possible, preventive maintenance.
	Cover chemical drums and bags, empty lime and depilatory chemical containers and leather scraps with roof or temporary covering (e.g., tarpaulins, polyethylene) and store on elevated impermeable surface.
	Curbing, containment dikes around chemical storage, empty lime and depilatory chemical containers and leather scrap storage area.
	Inspect area regularly for leaking drums, broken bags, proper implementation of good housekeeping and control measures (broken cracked dikes), material inventory, material storage and operation and maintenance.
	Clean up leaks and spills quickly and completely, use drip pans for leaking equipment.
	Good Housekeeping—all paved areas should be swept regularly, eliminate unnecessary flushing with water and label chemical drums and containers.
	Employee training on good housekeeping, proper handling of chemicals.
Tanyards	BMPs for Tanyards (empty chemical containers and hides, leather dust, shavings) are the same as those listed above for Beamhouse Activities.
Retan and wet finish	Dust reduction through frequent inspection of vacuum, collector (bag & cyclone), and filter systems.
	Dust reduction through enclosure and covering.
	Preventive maintenance/inspection of dust collection systems.
	Good Housekeeping-regular sweeping of paved areas, eliminate unnecessary flushing with water and label chemical drums and containers.
	Employee training on good housekeeping, proper handling of chemicals.
Dry Finish	Preventive maintenance, inspection of spray booths.
	Employee training on proper disposal of spent solvents.
Receiving and shipping	Cover shipping and receiving area.
	Cover trucks.
	Vehicle positioning—locating trucks while transferring materials to prevent spills onto the ground surface.
	Grade berm or curb area to prevent storm water runon contamination, divert rain gutters away from loading area.
	Clean spills immediately.
	Inspect trucks for leaks.
	Employee training in spill prevention.
Liquid storage in above ground tanks	Clearly tag valves to avoid human error.
	Install overflow protection devices on tank systems to warn operator or to automatically shut down transfer pumps when tanks reach full capacity.
	Secondary containment around tanks.
	Employee training.
	Inspection of tank foundations, connections, coatings, valves and piping systems.
	Comply with existing spill prevention, cleanup and countermeasure plans (SPCC plan) and State and Federal laws.
	Integrity testing by qualified professional.
Improper connections to storm sewers	Plug all floor drains connected to sanitary or storm sewer.
	Perform smoke or dye testing to determine if interconnections exist between sanitary water system and storm sewer system.
	Update facility schematics to accurately reflect all plumbing connections.
	Install a safeguard against washwaters from processing areas entering the storm sewer unless permitted.
	Train employees on proper disposal practices for all materials.
Waste management	Conduct waste reduction assessment—develop guidelines for the elimination of waste generation emissions.
	Institute industrial waste source reduction and recycling BMPs.
	Move waste management activities indoors (after safety concerns are addressed) and cover waste piles, dumpsters, hoppers, place on impermeable elevated surfaces.
	Prevent storm water runon by curbing, building berms.
	Cover trucks and inspect for leaking wastes.
	Inspection of waste management areas for leaking containers, spills, damaged containers, uncovered waste piles, dumpsters, hoppers.
	Inspection of roof areas and outside equipment.
	Develop and maintain proper erosion control or site stabilization measures.
	Train employees on proper disposal practices for all materials.

Sources: NPDES Storm Water Group Applications—Part 1.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities—Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

EPA, Office of Research and Development. January 1993. "Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems. A User's Guide." EPA/600/R-92/238.

5. Storm Water Pollution Prevention Plan Requirements

All facilities covered by this section must prepare and implement a storm water pollution prevention plan. The establishment of a pollution prevention plan requirement reflects EPA's decision to allow operators of leather tanning facilities to select BMPs as the Best Available Technology/Best Control Technology (BAT/BCT) level of control for the storm water discharges covered by this section. The requirements included in pollution prevention plans provide a flexible framework for the development and implementation of site specific controls to minimize pollutants in storm water discharges. This approach is consistent with the approach used in the baseline general permits finalized on September 9, 1992 (57 FR 41236).

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from leather tanning facilities. Pollution prevention plans allow the operator of a facility to select BMPs based on site-specific considerations such as facility size, climate, geographic location, the environmental setting of the facility, and volume and type of discharge generated. This flexibility is necessary because each facility will be unique in that the source, type, and volume of contaminated surface water discharges will differ from site to site.

There are two major objectives to a pollution prevention plan (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility. Specific requirements for a pollution prevention plan for leather tanning facilities and facilities which make fertilizer solely from leather scraps and dust are described below.

a. Contents of the plan. Storm water pollution prevention plans are intended to help leather tanners evaluate all potential pollution sources at a site, and assist in the selection and implementation of appropriate measures designed to prevent, or control the discharge of pollutants in storm water runoff. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, 1992 (EPA 832–R–92–006), to assist permittees in developing and implementing pollution prevention measures.

(1) Description of potential pollutant sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather result in dry weather flows. This assessment of storm water pollution will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Plans must describe the following elements:

(a) Drainage—The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in storm water runoff and process wastewater discharges, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map also must show areas where the following activities take place: Fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal, haul roads, access roads, and rail spurs. In addition the site map must also identify monitoring locations.

(b) Inventory of exposed materials—Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must addresses materials that within 3 years prior to the effective date of the permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may effect the exposure of materials to storm water.

(c) Significant spills and leaks—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant pills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.0 and 40 CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4). Significant spill may also include releases of oil or hazardous substances that are not in excess of reporting requirements and release of materials that are not classified as oil or a hazardous substance. The list shall be updated as appropriate during the term of the permit.

(d) Sampling data—Any existing data on the quality or quantity of storm water discharges from the facility must described in the plan. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

(e) Risk identification and summary of potential pollutant sources—The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the operator of the facility must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids,

biochemical oxygen demand, etc.) associated with each source.

(2) Measures and controls. Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

(a) Storage areas for raw, semiprocessed, or finished tannery by-products—Pallets and/or bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings, etc.) that are stored where there is potential storm water contact, must be stored indoors or protected by polyethylene wrapping, tarpaulins, roofed storage area or other suitable means. Materials should be placed on an impermeable surface, the area should be enclosed or bermed or other equivalent measures should be employed to prevent runon or runoff of storm water.

(b) Material storage areas—Label storage units of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials). Maintain such containers and units in good condition. Describe measures that prevent or minimize contact with storm water. The facility must consider indoor storage and/or installation of berming and diking around the area to prevent runon or runoff of storm water.

(c) Buffing/shaving areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff with leather dust from buffing/shaving areas. The facility may consider dust collection enclosures, preventive inspection/maintenance programs or other appropriate preventive measures.

(d) Receiving, loading, and storage areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from receiving, unloading, and storage areas. Exposed receiving, unloading and storage areas for hides and chemical supplies should be protected by a suitable cover, diversion of drainage to the process sewer, directing rain gutters away from loading/receiving areas, grade berming or curbing area to prevent runon of storm water or other appropriate preventive measures.

(e) Outdoor storage of contaminated equipment—The plan must describe measures that minimize contact of storm water with contaminated equipment. Equipment should be protected by suitable cover, diversion of drainage to the process sewer, thorough cleaning prior to storage or other appropriate preventive measures.

(f) Waste management—The plan must describe measures that prevent or minimize contamination of the storm water runoff from waste storage areas. The facility may consider inspection/maintenance programs for leaking containers or spills, covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulin or polyethylene, and minimizing storm water runon by enclosing the area or building berms around the area.

(g) Vehicle maintenance and fueling—Permittees must follow all applicable requirements described in Part XI.P. for controlling storm water discharges from vehicle maintenance and refueling areas.

(h) Improper connections to storm sewers—The plan must describe measures which prevent and prohibit washwaters from processing areas from entering storm sewers. The facility must install safeguards against wash waters entering storm sewers and train employees on proper disposal practices for disposal of all process waste materials.

These areas are sources of pollutants in storm water from leather tanning facilities. EPA believes that the incorporation of BMPs such as those suggested, in conjunction with the pollution prevention plan, will substantially reduce the potential of storm water contamination from these areas. Based upon the information provided in part 1 of the group application process, some of the suggested management processes are being used at leather tanning facilities. In addition, EPA believes that these requirements continue to provide the necessary flexibility to address the variable risk for pollutants in storm water discharges associated with different facilities. Further, many facilities will find that management measures that they have already incorporated into the facilities operation, such as the use of covers and roofing, containers, and berms and dikes will meet the requirements of this section.

• *Preventive Maintenance*—Under the preventive maintenance requirements of the pollution prevention plan, permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. The maintenance program requires periodic removal of debris from discharge diversions. Permittees using ponds to control their effluent limitation frequently use impoundments or sedimentation ponds as their BAT/BCT.

Maintenance schedules and maintenance measures for these ponds must be provided in the pollution prevention plan.

The purpose of the inspections is to check on the accuracy of the description of potential pollution sources contained in the plan, determine the effectiveness of the plan and implementation of the storm water pollution prevention plan. The inspections allow facility personnel to monitor the success or failure of elements of the plan on a regular basis. The use of an inspection checklist is recommended. The checklist will ensure that all required areas are inspected, as well as help to meet the record keeping requirements. Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

• *Inspections*—Under the inspection requirements of the storm water pollution prevention plan elements, qualified facility personnel shall be identified to inspect designated areas of the facility, at a minimum of every 3 months. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. The following areas shall be included in all inspections: storage areas for equipment and vehicles awaiting maintenance, facility yard area where outdoor storage occurs, receiving and unloading areas and waste management areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained and the pollution prevention plan modified where necessary.

In addition, qualified personnel must conduct quarterly visual inspections of all BMPs. The inspections shall include an assessment of the effectiveness and need for maintenance of storm water roofing and covers, dikes and curbs, discharge diversions, sediment control and collection systems and all other BMPs.

Quarterly visual inspections must be made at least once in each of the following designated periods during daylight hours. December–February (storm water runoff or snow melt), March–May (storm water runoff), June–

August (storm water runoff), and September–November (snow melt runoff). Records shall be maintained as part of the pollution prevention plan.

• *Employee Training*—Under the employee training component of the storm water pollution prevention plan requirements, the permittee is required to identify annual (once per year) dates for training. Employee training must, at a minimum, address the following areas when applicable to a facility: General good housekeeping practices, spill prevention and control, waste management, inspections, preventive maintenance, detection of non-storm water discharges and other areas.

• *Record Keeping and Internal Reporting*—Permittees must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be reported and the date of their corrective action recorded. Employees must report incidents of leaking fluids to facility management and these reports must be incorporated into the plan.

• *Storm Water Management*—The permittee must evaluate the appropriateness of each storm water BMP that diverts, infiltrates, reuses, or otherwise reduces the discharge of contaminated storm water. In addition, the permittee must describe the storm water pollutant source or activity (i.e., loading and unloading operations, raw material storage piles, waste piles, etc.) to be controlled by each storm water management practice.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) Confirm the accuracy of the description of potential pollution sources contained in the plan; (2) determine the effectiveness of the plan; and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations should be conducted twice a year for leather tanning facilities. These inspections are intended to be more in depth than the quarterly visual inspections. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires. Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

6. Numeric Effluent Limitations

There are no numeric effluent limitations for storm water discharges from leather tanning facilities beyond those described in Part VI.E. of the fact sheet.

7. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that leather tanning and finishing facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires leather tanning and finishing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table Z–5. The pollutants listed in Table Z–5 were found to be above levels of concern for a significant portion of leather tanning and finishing facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at levels of concern from leather tanning and finishing facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from leather tanning and finishing facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table Z–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE Z–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Biochemical Oxygen Demand (BOD_5)	9.0
Total Kjeldahl Nitrogen (TKN)	1.5
Nitrate and Nitrite Nitrogen	0.68
Total Recoverable Aluminum	0.75
Total Recoverable Manganese	0.05

If the average concentration for a parameter is less than or equal to the value listed in Table Z–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table Z–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit. Table Z–6 provides a schedule of monitoring requirements.

TABLE Z–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table Z–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table Z–5, then no further sampling is required for that parameter.

TABLE Z–6.—SCHEDULE OF MONITORING—Continued

4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table Z–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table Z–5 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table Z–5. Facilities that achieve average discharge concentrations which are less than or equal to the values in Table Z–5 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, and deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.D of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of a storm water discharge from each outfall are required for leather tanning and finishing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well-lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: The examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds,

hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.Z.7 of today's proposed permit.

a. Leather tanning facilities not reporting under section 313 of SARA title III. (1) During the period beginning on the effective date and lasting through the expiration date of this permit, permittees would be required to monitor those storm water discharges identified in Table Z–7 below at least annually.

Table Z–7

Parameter	Unit	Frequency[1]	Sample Type[2]
BOD5	mg/L	annually ...	grab.
COD	mg/L	..... do	Do.
Total Kjeldahl Nitrogen	mg/L	..... do	Do.
Oil and Grease	mg/L	..... do	Do.
pH	s.u. ..	..... do	Do.
Total Phosphorus	mg/L	..... do	Do.
Total Suspended Solids	mg/L	..... do	Do.
Chromium, Total	mg/L	..... do	Do.
In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.			

[1] Samples shall be taken annually over the term of the permit.
[2] The grab sample shall be collected in the first 30 minutes of the discharge or as soon thereafter as practical, but not to exceed 60 minutes.

b. Leather tanning facilities reporting under section 313 of SARA title III. (1) Facilities reporting under Section 313 would monitor their storm water discharges according to the requirements listed at Part VI.

c. Quarterly visual examination of storm water quality. (1) Facilities shall perform and document a visual examination of storm water quality of all storm water discharges associated with industrial activity including but not limited to loading and unloading areas, chemical storage areas, vehicle and equipment maintenance activities, equipment cleaning operations, refuse areas and waste management areas. If the storm water from such operations flows such that there are numerous small points of discharge, one visual examination of one representative discharge may be conducted as a representation of the adjacent flows. The examination must be made at least once in each designated period [described in Part (2) (below)] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(2) Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); and September to November (storm water runoff or snow melt).

(3) Visual examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information must be maintained on site and include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

(5) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Reporting: When to submit. (1) Permittees with facilities identified in Part XI.Z.8.a. [Leather Tanning Facilities Not Reporting Under Section 313 of Superfund Amendments and Reauthorization Act (SARA) Title III] are not required to submit monitoring results, unless required in writing by the Director.

(2) Permittees with facilities identified in Part XI.Z. (Leather Tanning Facilities Reporting Under Section 313 of SARA Title III) must conduct monitoring and submit the results according to the requirements listed at Part VI.

9. Retention of Records

a. The permittee shall retain records of all inspections and monitoring

information, including certification reports, noncompliance reports, calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, and supporting data, requested by the permitting authority for at least 3 years after the date that the permit expires.

AA. Storm Water Discharges Associated With Industrial Activity From Fabricated Metal Products Industry

1. Discharges Covered Under This Section

On November 16, 1990 [55 **Federal Register** (FR) 47990], the U.S. Environmental Protection Agency (EPA) promulgated the regulatory definition of "storm water discharges associated with industrial activity." This section of today's proposed permit covers storm water discharges associated with industrial activities from metal fabrication processes and operations. Fabricated metal and processing facilities eligible for coverage under this section include the following types of operations:

- Fabricated Metal Products, Except Machinery and Transportation Equipment, Standard Industrial Classification (SIC) code 34 (3429, 3441, 3442, 3443, 3444, 3451, 3452, 3462, 3465, 3471, 3479, 3494, 3496, 3499)
- Jewelry, Silverware, and Plated Ware, SIC code 391.

This section covers establishments engaged in fabricating ferrous and nonferrous metal products, such as metal cans, tinware, general hardware, automotive parts, tanks, road mesh, structural metal products, nonelectrical equipment, and a variety of metal and wire products from purchased iron or steel rods, bars, or wire materials. This section does not cover discharges from establishments engaged in manufacturing and rolling of ferrous and nonferrous metals, forgings or stampings, electrolytic or other processes for refining copper from ore. These establishments are addressed in a separate section of today's proposed permit. Therefore, if a given storm water discharge is addressed by more than one set of industry specific conditions, the requirements for the applicable classes of activities apply.

Storm water discharges covered by this section include all discharges where precipitation and storm water runoff come into contact with industrial activity including such things as: raw materials, waste products, by-products, overburden, stored materials, and fuels. This includes storm water discharges from haul roads, access roads, industrial plant yards, and rail lines used or traveled by carriers of raw materials, manufactured product, waste materials, or by-products created by the facility.

Impacts caused by storm water discharges from fabricating operations will vary from one facility to the next. Several factors influence to what extent significant materials from fabricators will affect water quality. Specifically, the use of indoor operations as opposed to outdoor storage facilities; discharges to Publicly Owned Treatment Works (POTWs); recycling programs; product choice in the various operations; and the number of operations that take place at a given facility based on customer needs; and use of storm water controls.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

This section does not cover any discharge subject to process wastewater effluent limitation guidelines, including storm water that combines with process wastewater.

2. Industrial Profile

These facilities are engaged in the manufacturing of a variety of products that are constructed primarily by using metals. The operations performed usually begin with materials in the form of raw rods, bars, sheet, castings, forgings, and other related materials and can progress to the most sophisticated surface finishing operations. There are typically several operations that take place at a fabrication facility: machining operations, grinding, cleaning and stripping, surface treatment and plating, painting, and assembly. The machining operation involves turning, drilling, milling, reaming threading, broaching, grinding, polishing, cutting and shaping, and planing. Grinding is the process using abrasive grains such as aluminum oxide, silicon carbide, and diamond to remove stock from a workpiece. Cleaning and stripping is a preparatory process involving solvents for the removal of oil, grease and dirt. Both alkaline and acid cleaning are employed. Surface treatment and plating is a major component that involves batching operations to increase corrosion or abrasion resistance. This is generally in the form of galvanizing. Painting is generally practiced at most facilities to provide decoration and protection to the product or item. Assembly is the fitting together of previously manufactured parts into a complete unit or structure.

Industrial activities and storm water management practices are typically similar in the fabricating industry, varying mostly in the type of chemicals used in the processes and the final product. Examples of products being fabricated in this industry include: aircraft engines, screws, nuts, bolts, automotive parts (drive shafts, struts, gears, rods), tanks, hand tools, doors, and bridge grates.

Many of the operations in this industry take place indoors. The major activities evaluated for purposes of storm water contamination and control measures include: waste storage, outside product storage, use of pickling acids, storage of cutoff scrap metal, aluminum scraps, hazardous materials, galvanized steel components, solvent storage, waste paper storage, machinery storage, and maintenance of existing Best Management Practices (BMPs). The table below lists the most likely wastes to be generated at a steel fabricating facility.

TABLE AA–1.—WASTES GENERATED FROM FABRICATED METALS INDUSTRIES

Type of waste	Activity	Source
Used metal working fluid with fine metal dust.	Tool workpiece interface/shaving, chipping.	Metal working fluid
Spent solvents	Parts/tools cleaning, sand blasting, metal surface cleaning, removal of applied chemicals.	Solvent cleaners, abrasive cleaners, alkaline cleaners, acid cleaners, rinse waters.
Cuttings, scraps, turnings, fines	Making structural components	Raw metals.
Paint, spent stripping solutions	Painting operations	Paints, solvents, and painting equipment.

3. Storm Water Sampling Results

Table AA–2 summarizes the storm water monitoring results for the pollutants required by Part A of form 2F that were reported by facilities in this sector. Table AA–2 provides composite sample data and grab sample results.

TABLE AA–2.—STATISTICS FOR CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS FOR THE FABRICATED METAL PRODUCTS INDUSTRY (MG/L EXCEPT AS NOTED)[i]

Pollutant	# of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	115	111	28.3	10.0	0.0	0.0	524.0	57.0	7.6	7.0	81.0	40.0	503.0	53.1
COD	115	114	118.2	86.2	0.0	0.0	1380.0	962.0	56.0	47.5	440.0	249.0	1200.0	716.0
Nitrate Nitrite Nitrogen	115	114	1.48	1.27	0.0	0.0	14.9	14.4	0.74	0.765	7.0	3.5	14.0	12.54
Total Kjeldahl Nitrogen	115	114	2.61	1.78	0.0	0.0	29.3	9.12	1.37	1.2	7.2	5.75	26.5	8.1
Oil & grease	114	N/A	6.1	N/A	0.0	N/A	86.0	N/A	2.0	N/A	21.0	N/A	72.3	N/A
pH (s.u.)	103	N/A	N/A	N/A	3.3	N/A	9.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	113	114	1.03	0.84	0.0	0.0	16.0	12.0	0.22	0.205	9.8	4.8	11.0	10.8
Total Suspended Solids	115	114	187.0	125	0.0	0.0	2340	3235	76	32	758	423	1700	1078
Aluminum	13	13	110.20	12.51	0.0	0.0	1400.0	130.0	1.2	1.0	N/A	N/A	1400.0	130.0
Copper	36	33	0.63	0.46	0.0	0.0	13.90	13.0	0.03	0.02	N/A	N/A	13.90	13.0
Iron	35	34	4.46	2.71	0.0	0.0	25.10	26.0	1.42	0.57	N/A	N/A	25.1	26.0
Manganese	23	22	0.12	0.07	0.0	0.0	0.39	0.37	0.06	0.02	N/A	N/A	0.39	0.37
Zinc	60	58	4.20	2.17	0.0	0.0	157.0	22.8	0.36	0.21	N/A	N/A	157.0	22.80

[i] Mean, Minimum, Maximum, and Percentiles include all detects and nondetects.
[ii] Composite samples.

EPA also reviewed the monitoring results for nonconventional and priority toxic pollutants required by Parts B and C of Form 2F. Table AA–3 summarizes the results for parameters where some of the reported values exceeded Effluent Guideline Limitations or "Gold Book" values and may be the result of industrial activities performed by the metal fabricating industry. The toxics information is limited by the few samples received for this sector. Therefore, it is difficult to conclude that these toxic pollutants are or are not pollutants of concern in the storm water discharges from facilities in this sector. Additional monitoring is warranted to further characterize these pollutants.

TABLE AA–3.—RESULTS OF PRIORITY TOXIC POLLUTANTS

Pollutant	Unit	Range—grab samples	Range—composite samples	Effluent guideline limits/CFR
Zinc	mg/L	.021–157.	0.12–22.8	1.0 (440)
Iron	mg/L	0.06–25.1	0.06–26.0	7.0 (434)
Lead	mg/L	0.04–0.16	0.018–0.22	.6 (440)

[1] Gold book value for acute fresh water.

a. Summary of pollutants of concern. More than 50 percent of the facilities in the sector reported concentrations for TSS to be above 76 milligrams per liter (mg/L), which is above the effluent limitation guideline for coal pile runoff of 50 mg/L. The minimum grab TSS concentration was 0 mg/L and the mean grab concentration was 187 mg/L. In comparison to other industry sectors in today's proposed permit, these levels warrant concern. About 80 percent of the facilities in this sector indicated that most of the facilities are devoid of vegetation and ground surfaces were barren. EPA believes that this condition and the use of heavy equipment causing erosion and conveyances for storm water runoff, along with any pollutants collected in the soil can contribute to the high levels of Total Suspended Solids reported in the analytical data. In addition, concentrations of aluminum, zinc, iron, copper, and manganese varied widely, but in some cases, exceeded "Gold Book" values.

4. Options for Controlling Pollutants

The measures to control pollutants at metal fabricating operations should focus primarily on the storage of waste and raw materials; chemical storage areas; and equipment storage and service areas. Since most of the operations occur indoors, procedures are necessary in the handling and transporting of materials to minimize exposure of pollutants to storm water runoff. Of primary importance is the control of activities and use of chemicals that have been identified as potential sources of pollutants. The most effective discharge controls for these facilities are BMPs targeted toward source control. This includes utilizing inside storage as much as possible; and implementing programs for recycling scrap materials. Many of these practices require the use of covers, indoor storage, and indoor operations. Some structural measures would provide an additional control to reduce the potential for exposure at these facilities. These include source reduction diversion dikes, grass swales, vegetative covers, and sedimentation ponds. Preventive controls are typically low in cost and relatively easy to implement, as the majority of the facilities in this industry already employ these practices. In addition, directing flows to privately owned treatment works or retention ponds will be the most effective measure. The industry also must give consideration to the non-storm water discharges associated with improper disposal of materials from the indoor processes due to the extensive use of chemicals in the preparation and finishing phases of metal preparation and fabrication. The industry also involves grinding, welding, and sanding operations that will require special consideration to control potential pollutants that could accumulate and be subject to storm water runoff. Most of the measures commonly implemented to reduce pollutants in storm water associated with the fabricated metals industry are generally uncomplicated practices. Some of the practices may be predicated on the size of the operation, the types of processes that are exercised from a full-scale plant operation to a more specialized company that conducts only a portion of the operations usually found in the fabricating industry. Table AA–4 below is an outline of the most common activities and sources that may produce pollutants associated with different activities that routinely take place at fabricated metal industries. Following the table is a brief list of BMPs that EPA believes will help reduce and control the potential pollutant sources at fabricating facilities from contaminating storm water.

Table AA–4.—POLLUTANTS POTENTIALLY FOUND IN STORM WATER DISCHARGES ASSOCIATED WITH THE FABRICATED METAL INDUSTRY

Activity	Pollutant source	Pollutant
Metal preparation	Grinding, welding, sawing, shaving, brazing, bending, cutting, etching.	Steel scraps, aluminum scraps, brass, copper, dust, chips and borings, steel scale, teflon, manganese.
Parts cleaning	Solvents, cold and hot dips, cleaning parts, degreasing.	Acid, coolants, clean composition, degreaser, mineral spirits, pickle liquor, spent caustic, sludge.
Surface Treatment	Finishing, plating, case hardening, chemical coating, coating, polishing, rinsing, abrasive cleaning, electroplating.	Acid, aromatic solvent, corn cob, lubricants, sand, oil, pH, nitrates, nitrites, carbon, phosphates, borates, nitrogen, oily sludge, nickel, chromium, hydrofluoric acid.
Galvanizing	Spills, leaks, transporting materials	Acid solution, phosphates, zinc chromate hexavalent chromium, nickel.
Painting	Empty containers, paint application wastes, spills, over spraying, storage areas.	Paint wastes, thinner, varnish, heavy metals, spent chlorinated solvents.

Table AA–4.—POLLUTANTS POTENTIALLY FOUND IN STORM WATER DISCHARGES ASSOCIATED WITH THE FABRICATED METAL INDUSTRY—Continued

Activity	Pollutant source	Pollutant
Heavy equipment use and storage	Leaking fluids, fluids replacement, washing equipment, use on poor surface area, soil disturbance.	Oil, heavy metals, organics, fuels, TSS, hydraulic oil, diesel fuel, gasoline.
Equipment maintenance	Leaking fluids, fluids replacement, washing equipment.	Oil, grease.
Storage of uncoated structural steel	Stored on porous pavement	Aluminum, lead, zinc, copper, iron, oxide, oil, nickel, manganese.
Storing galvanized steel directly on the ground.	Galvanizing material drippage or leaching	Metals: zinc, nickel, cadmium, chromium.
Vehicle/equipment traffic	Soil disturbance and erosion	TSS from erosion, hydraulic fluid loss/spillage.
Cleaning equipment/vehicles	Chemicals disposed improperly, spillage	Oil, grease, surfactants, chromates, acid, hydroxide, nitric acid.
Storage areas	Unidentifiable drums, extended exposure to weather conditions, tank corrosion, open containers.	Benzene, toluene, xylene, pyrene, and other volatile organics, solvents.
Equipment usage	Malfunctioning equipment, stockpiled obsolete equipment.	Oil, grease, lead.
Above ground storage tanks	Installation problems, spills, external corrosion and structural failure.	Fuel oil and various chemicals.

Table AA–4 above shows the potential pollutants that could end up in storm water runoff if the activities typically found at a fabricating facility are not handled properly. Many of the fabricating facilities in the group application indicated several of the activities listed as a part of the normal operations carried out at the facility. Many of the pollutants involved in these activities are potentially of concern if exposed to precipitation and storm water runoff. Consideration of control measures is needed to assure that the activities minimize exposure to the potential pollutants of concern as it relates to each activity identified and control the potential sources that may generate pollutants as part of the management practices used.

5. Special Conditions

The permit conditions that apply to the fabricated metals industry build upon the requirements set forth in the general baseline permit for storm water discharges from industrial activities finalized on September 9, 1992 (57 FR 41236). The discussion that follows, therefore, only addresses conditions that differ from those required in the baseline permit.

Due to the concern that many non-storm water discharges may be present at metal fabricators, EPA is requiring that all facilities provide proof that these discharges are not commingled and are appropriately controlled so as to protect all receiving waters.

Today's proposed permit clarifies in Part XI.AA.2. (Prohibition of Non-storm Water Discharges) that non-storm water discharges, including metal fabricator operations, are not authorized by this section. The operators of such non-storm water discharges must obtain coverage under a separate National Pollutant Discharge Elimination System (NPDES) permit if discharged to waters of the United States or through a municipal separate storm sewer system. In a related requirement under the storm water pollution prevention plan requirements, the permittee is required to attach a copy of the NPDES permit issued for metal acid baths, sludge disposal, scrap disposal or recycling or, if an NPDES permit has not yet been issued, a copy of the pending application plan. Facilities that pretreat and discharge the waste water into a POTW system must notify the operator and a copy of the notification must be attached to the plan. With regard to all the acid baths, wash waters, and any other non-storm water discharges must be considered in the plan. Some facilities may use retention ponds, recycling, collecting and hauling as methods of disposal. Other facilities discharge into separate storm sewer systems. In these instances, the facility is required to attach the disposal plans and operations to the plan.

6. Storm Water Pollution Prevention Plan Requirements

Each storm water pollution prevention plan must stipulate activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows. The metals fabricating industry plan will need to focus primarily on storage areas, unloading and loading areas, and any other areas where outside operations occur.

Under the description of measures and controls in the storm water pollution prevention plan requirements, this section proposes that all areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. This section also proposes that the following areas must be specifically addressed:

a. Potential best management practices in relationship to various activities at fabricating facilities. (1) Metal fabricating areas. These areas should be kept clean by frequent sweeping to avoid heavy accumulation of steel ingots, fines, and scrap. Dust is a byproduct of many processes in the fabricating areas and therefore should be absorbed through a vacuum system to avoid accumulation on roof tops and onto the ground. Tracking of metal dusts and metal fines outdoors can be minimized by employing these management practices.

- Sweep on a regular basis all accessible paved areas.
- Maintain floors in a clean and dry condition.
- Remove waste and dispose of regularly.
- Remove obsolete equipment expeditiously.
- Sweep fabrication areas.
- Train employees on good housekeeping measures.

(2) Storage areas for raw metal. The storage of raw materials should be under a covered area whenever possible and protected from contact with the ground. The amount of material stored should be minimized to avoid corrosive activity from long-term exposed materials. Diking or berming the area to prevent or minimize run-on may be considered. Long-term exposure to weather conditions results in oxidation of the metals. Also, dirt, oil, and grease buildup on the metal are potential sources of pollutants.

• Check raw metals for corrosive activity.
• Keep area neat and orderly, stack neatly on pallets or off the ground.
• Cover exposed materials.

(3) Receiving, unloading, and loading areas. These areas should be enclosed where feasible using either curbing, berming, diking or other accepted containment systems in case of spills during delivery of chemicals such as lubricants, coolants, rust preventatives, solvents, oil, sodium hydroxide, hydrochloric acid, calcium chloride, polymers, sulfuric acid, and other chemicals used in the metal fabricating processes. Directing roof down spouts away from loading sites and equipment and onto grassy or vegetated areas should help prevent storm water contamination by pollutants that have accumulated in these areas.
• Clean up spills immediately.
• Check for leaks and remedy problems regularly.
• Unload under covered areas when possible.

(4) Storage of heavy equipment. Vehicles should be stored indoors when possible. If stored outdoors the use of gravel, concrete or other porous surfaces should be considered to minimize or prevent heavy equipment from creating ditches or other conveyances that would cause sedimentation runoff and increase TSS loadings. Also directing the flow toward the area by the use of grass swales or filter strips will reduce the runoff of materials. Directing drainage systems away from high traffic areas into collection systems will help to reduce the TSS loadings caused by exposed and eroding open areas.
• Clean prior to storage or store under cover.
• Store indoors.
• Divert drainage to the grass swales, filter strips, retention ponds, or holding tanks.

(5) Metal working fluid areas. Due to the toxicity of metal working fluids as well as the contamination of fluids by metal fines and dusts, spillage and loss of metal working fluids used to cleanse or prepare the steel components should be controlled throughout the process. Collection systems and storage areas need special consideration.
• Store used metal working fluid with fine metal dust indoors.
• Use tight sealing lids on all fluid containers.
• Use straw, clay absorbents, sawdust, or synthetic absorbents to confine or contain any spills, or other absorbent material.
• Establish recycling programs for used fluids when possible.

(6) Unprotected liquid storage tanks. Storing these tanks (this does not include products that are gaseous at atmospheric pressure) indoors will reduce potential waste or spills from contaminating storm water. Berming outdoor areas when unable to store inside will contain potential pollutants. Cleaning up spills is essential to minimizing buildup in these areas. EPA believes that this will significantly reduce the potential for major discharges into the water of the United States during storm runoff.
• Cover all tanks whenever possible.
• Berm tanks whenever possible.
• Dike area or install grass filters to contain spills.
• Keep area clean.
• Check piping, valves and other related equipment on a regular basis.

(7) Chemical cleaners and rinse water. Proper disposal and use of cleaners in various activities will minimize the amount of liquid exposed to storm water by reducing the need to store contaminated liquids for an extended period of time. Controlling potential contamination of pollutants by employing simple control devices during the activity will prevent potential contamination in storm water runoff. Recycling or reuse of these materials whenever possible serves as a source reduction by reducing the necessary amount of new materials.
• Use drip pans and other spill devices to collect spills or solvents and other liquid cleaners.
• Recycle waste water.
• Store recyclable waste indoors or in covered containers.
• Substitute nontoxic cleaning agents when possible.

(8) Raw steel collection areas. The collection areas must be kept clean. Materials should be kept in a covered storage bin or kept inside until pickup. The use of pitched-structures should be considered.
• Collect scrap metals, fines, iron dust and store under cover.
• Recycle.

(9) Paints and painting equipment. Facilities using tarps, drip pans, or other spill collection devices to contain and collect spills of paints, solvents or other liquid material. Blasting in windy weather increases the potential for runoff. Enclosing outdoor sanding areas with tarps or plastic sheeting contains the finds of metal. Immediate collection of any waste and proper disposal may significantly contribute to the reduction of storm water runoff. Training employees to use the spray equipment properly may reduce waste and decrease the likelihood of accidents, as well as, reduce the amount of solvents needed to complete the job.
• Paint and sand indoors when possible.
• Avoid painting and sandblasting operations outdoors in windy weather conditions.
• If done outside, enclose sanding and painting areas with tarps or plastic sheeting.
• Use water-based paints when possible to decrease.

(10) Vehicle and equipment maintenance areas. Changing fluids or parts should be done indoors when possible. If maintenance is performed outdoors, fluids used in maintaining these vehicles should be contained in the area by using drip pans, large plastic sheets, canvas or other similar controls under the vehicles, or berming the area. Hydraulic fluids should be properly stored to prevent leakage and storm water contamination.
• Berm area or use other containment device to control spills.
• Use drip pans, plastic sheeting and other similar controls.
• Discard fluids properly or recycle if possible.

(11) Hazardous waste storage areas. All hazardous waste must be stored in sealed drums. Establishing centralized drum-storage satellite areas throughout the complex to store these materials will decrease the potential for mishandling drums. Berming the enclosed structures is added protection in case of spills. Spills or leaks that are contained within an area are easier to contain and prevent storm water contamination or runoff. Checks for corrosion and leakage of storage containers is important. Proper labelling for proper handling might be considered. All other applicable Federal, State, and local regulations must be followed.
• Store indoors.
• Label materials clearly.
• Check for corrosive activity and leaking.
• Properly dispose of outdated materials.
• Dike or use grass swales, ditches or other containment to prevent runon or runoff in case of spills.
• Post notices prohibiting dumping of materials into storm drains.
• Store containers, drums, and bags away from direct traffic routes.
• Do not stack containers in such a way as to cause leaks or damage to the containers.
• Use pallets to store containers when possible.
• Store materials with adequate space for traffic without disturbing drums.
• Maintain low inventory level of chemicals based on need.

(12) Transporting chemicals to storage areas. Proper handling of drums is

needed to avoid damaging drums and causing leaks. Storage areas should be as close as possible to operational buildings.

- Forklift operators should be trained to avoid puncturing drums.
- Store drums as close to operational building as possible.
- Label all drums with proper warning and handling instructions.

(13) Finished products (galvanized) storage. Improper storage of finished products can cause a significant amount of erosion and contribute to the TSS levels. Also transporting these materials to the storage areas by the use of heavy equipment increases the possibility of conveyances for storm water runoff of soil and other contaminates from the finished products such as various lubricants and residual traces of metal.

- Use wooden pallets to decrease erosion of soil.
- Store on a concrete pad, gravel surface, or other impervious surface.

(14) Wooden pallets and empty drums. Empty drums must be thoroughly cleaned of materials to avoid contamination. Contaminated wooden pallets and empty drums stored outdoors should be stored on concrete pads. Uncovered storage outdoors of uncontaminated wooden pallets is acceptable.

- Clean contaminated wooden pallets.
- Cover empty drums.
- Cover contaminated wooden pallets.
- Store drums and pallets indoors.

(15) Retention ponds (lagoon). Creating and maintaining retention ponds as a treatment system for settling out TSS would help to reduce the concentrations of these pollutants in storm water runoff.

- Provide routine maintenance.
- Remove excess sludge periodically.
- Aerate periodically to maintain pond's aerobic character and ecological balance is important.

b. Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations should be conducted at least once a year. The individual or individuals that will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

7. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those described in Part VI of the fact sheet.

8. Monitoring and Reporting Requirements

a. Analytical monitoring requirements. EPA believes that fabricated metal and processing facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's proposed permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the proposed permit requires fabricated metal and processing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table AA–5. The pollutants listed in Table AA–5 were found to be above levels of concern for a significant portion of fabricating facilities that submitted quantitative data in the group application process, or are believed to be present based upon the description of industrial activities and significant materials exposed. Because these pollutants have been reported at levels of concern from fabricated metal and processing facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from fabricated metal and processing facilities must be monitored quarterly during the second year of permit coverage. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table AA–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

TABLE AA–5.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Total Recoverable Aluminum	0.75
Total Recoverable Copper	0.009
Total Recoverable Manganese	0.05
Nitrate+Nitrite Nitrogen	0.68
Total Recoverable Zinc	0.065
Total Recoverable Iron	0.3

If the average concentration for a parameter is less than or equal to the value listed in Table AA–5, then the permittee is not required to conduct quantitative analysis for that parameter during the fourth year of the permit. If, however, the average concentration for a parameter is greater than the cut-off concentration listed in Table AA–5, then the permittee is required to conduct quarterly monitoring for that parameter during the fourth year of permit coverage. Monitoring is not required during the first, third, and fifth year of the permit. The exclusion from monitoring in the fourth year of the permit is conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit.

TABLE AA–6.—SCHEDULE OF MONITORING

2nd Year of Permit Coverage.	• Conduct quarterly monitoring. • Calculate the average concentration for all parameters analyzed during this period. • If average concentration is greater than the value listed in Table AA–5, then quarterly sampling is required during the fourth year of the permit. • If average concentration is less than or equal to the value listed in Table AA–5, then no further sampling is required for that parameter.

TABLE AA–6.—SCHEDULE OF MONITORING—Continued

4th Year of Permit Coverage.	• Conduct quarterly monitoring for any parameter where the average concentration in year 2 of the permit is greater than the value listed in Table AA–5. • If industrial activities or the pollution prevention plan have been altered such that storm water discharges may be adversely affected, quarterly monitoring is required for all parameters of concern.

In cases where the average concentration of a parameter exceeds the cut-off concentration, EPA expects permittees to place special emphasis on methods for reducing the presence of those parameters in storm water discharges. Quarterly monitoring in the fourth year of the permit will reassess the effectiveness of the adjusted pollution prevention plan.

The monitoring cut off concentrations listed in Table AA–5 are not numerical effluent limitations. These values represent a level of pollutant discharge which facilities may achieve through the implementation of pollution prevention plans. At least half of the facilities which submitted Part 2 data, reported concentrations less than or equal to the values listed in Table AA–5. Facilities that achieve average discharge concentrations which are less than or equal to the values in Table AA–5 are not relieved from the pollution prevention plan requirements or any other requirements of the permit.

b. Alternative certification. Throughout today's permit, EPA has proposed monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative described below is necessary to ensure that monitoring requirements are only imposed on those facilities that do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if materials and activities are not exposed to storm water at the site, then the potential for pollutants to contaminate storm water discharges does not warrant monitoring.

Therefore, a discharger is not subject to the monitoring requirements of this Part provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan and submitted to EPA in accordance with Part VI.C of this permit.

c. Reporting requirements. Permittees are required to submit all monitoring results obtained during the second and fourth year of permit coverage within 3 months of the conclusion of each year. Such permittees must submit monitoring results on four separately signed Discharge Monitoring Report Forms to the Director. For facilities conducting monitoring beyond the minimum quarterly requirements an additional Discharge Monitoring Report Form must be filed for each analysis.

d. Sample type. All discharge data shall be reported for grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

e. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

f. Monthly visual examination of storm water quality. Monthly visual inspections of storm water discharges from each outfall are required at fabricated metal products facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each month of the permit during daylight unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: The examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds,

hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

EPA believes that this quick and simple assessment will allow the permittee to approximate the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

9. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.AA. of today's proposed permit.

a. Fabricated metal facilities are required under this permit to conduct annual monitoring of their storm water discharges for total suspended solids the first year the permit is issued and annually throughout the life of the permit if the limit exceeds the maximum allowable discharge prescribed under this permit. Permittees are also required to monitor annually for zinc, iron, chromium, cadmium and lead for the term of the permit. In addition, any pollutant limited by an effluent limitation guideline to which the facility is subject must be monitored annually throughout the life of the permit. Permittees must also estimate flows. These monitoring requirements are summarized in Table AA–7.

Visual inspections of all storm water discharges associated with industrial activity are required quarterly. These visual inspections shall include observations for color, odor, turbidity, floating solids, foam, scum, and oil sheen. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); and September to November (storm water runoff or snow melt).

Visual inspections must be made during daylight hours during precipitation events unless there is insufficient rainfall to produce a runoff event. Examinations are to be made within the first 30 minutes but not more than 60 minutes of flow. Reports of the inspection must be maintained onsite and include: the date, time, name of personnel conducting the inspection, visual quality of the storm water discharge, and any probable source of any observed storm water contamination. Based on the results, the pollution prevention plan must be modified to control sources.

TABLE AA–7.—MONITORING REQUIREMENTS

Parameter	Unit	Frequency	Sample type
Total flow	gallons	Annual	Estimate.
Total Suspended Solids (TSS)	mg/L	Annual (unless TSS is 50 mg/L; no monitoring if less than 50 mg/L)	Grab.
Zinc	mg/L	Annual	Do.
Iron	mg/L	.....do	Do.
Chromium	mg/L	.....do	Do.
Cadmium	mg/L	.....do	Do.
Lead	mg/L	.....do	Do.
Nickel	mg/L	.....do	Do.

In addition, the permittee shall record the following:
- Date and duration (in hours) of the storm event(s) sampled.
- Rainfall measurements (in inches) of the storm event.
- Duration between storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.
- Estimate the total flow (in gallons) of each discharge sampled.

AB. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery

On November 16, 1990 (55 FR 47990), EPA promulgated the regulatory definition of "storm water discharge associated with industrial activity." This definition includes point source discharges of storm water from eleven categories of facilities, including "* * * (xi) facilities classified as Standard Industrial Classification (SIC) codes * * * 35 (except SIC 357), 37 (except SIC 373), * * * ." Facilities eligible for coverage under this section of today's permit are commonly identified by the following SIC codes:

- Engines and Turbines (SIC Code 351).
- Farm and Garden Machinery and Equipment (SIC Code 352).
- Construction, Mining, and Materials Handling Machinery and Equipment (SIC Code 353).
- Metalworking Machinery and Equipment (SIC Code 354).
- Special Industry Machinery, Except Metalworking Machinery (SIC Code 355).
- General Industrial Machinery and Equipment (SIC Code 356).
- Refrigeration and Service Industry Machinery (SIC Code 358).
- Miscellaneous Industrial and Commercial Machinery and Equipment (SIC Code 359).
- Motor Vehicles and Motor Vehicle Equipment (SIC Code 371).
- Aircraft and Parts (SIC Code 372).
- Motorcycles, Bicycles, and Parts (SIC Code 375).
- Guided Missiles and Space Vehicles and Parts (SIC Code 376).
- Miscellaneous Transportation Equipment (SIC Code 379).

This section establishes special conditions for storm water discharges associated with industrial activities at facilities which manufacture transportation equipment, industrial or commercial machinery. The SIC codes of these facilities are in category (xi) of the definition of storm water discharges associated with industrial activity. Storm water discharges from facilities in this category are only regulated where

precipitation and storm water runon come into contact with areas associated with industrial activities, and significant materials. Significant materials include, but are not limited to, raw materials, waste products, fuels, finished products, intermediate products, by-products, and other materials associated with industrial activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

1. Industry Profile

There are approximately 14,000 facilities which handle and process ferrous and nonferrous metals to manufacture transportation equipment, industrial or commercial machinery. These facilities vary in size, age, number of employees and the types of operations performed. The manufacturing processes for these facilities are similar, although the finished products may vary. The general manufacturing process is conducted indoors, and includes activities such as cutting, shaping, grinding, cleaning, coating, forming, and finishing. Specific processes are referred to as "unit operations," and there are approximately 45 unit operations utilized by facilities that manufacture transportation equipment, industrial, or commercial machinery. Since these operations occur predominately indoors, contamination of storm water discharges from the manufacturing process is unlikely. Unit operations include the following: electroplating, electroless plating, anodizing, chemical conversion coating, etching and chemical milling, cleaning, machining, grinding, polishing, barrel finishing, burnishing, impact deformation, pressure deformation, shearing, heat treating, thermal cutting, welding, brazing, soldering, flame spraying, sand blasting, abrasive jet machining, electrical discharge machining, electrochemical machining, electron beam machining, laser beam machining, plasma arc machining, ultrasonic machining, sintering, laminating, hot dip coating, sputtering, vapor plating, thermal infusion, salt bath descaling, solvent degreasing, paint stripping, painting, electrostatic painting, electropainting, vacuum metalizing, assembly, calibration, testing, and mechanical plating.

Facilities which manufacture transportation equipment, industrial and commercial machinery will utilize many of the same unit operations listed above. Aside from the specific unit operations, other types of industrial activity are shared by facilities covered by this section. For example, the majority of these facilities have outdoor material handling and storage activities, and share the same types of raw, scrap, and waste materials.

The primary raw materials utilized by this industry group include ferrous and nonferrous metals, such as aluminum, copper, iron, steel and alloys of these metals; either in raw form or as intermediate products. These metals are typically received at loading/unloading docks and are taken to outdoor storage areas (e.g., stockpiles, holding bins) before manufacturing.

Besides metals, other raw materials are utilized in the manufacturing process. These materials include paints, solvents (e.g., paint thinners, degreasers), chemicals (e.g., acids, bases, liquid gases), fuels (e.g., gasoline and diesel fuel), lubricating and cutting oils, and plastics. These materials are typically stored in bins, tanks, and/or 55 gallon drums outdoors on wooden pallets or concrete pads. They are used during the unit operations to cool and lubricate the metals (oils), clean metal parts (solvents, acids, bases), and coat metal parts before shipment (plastics, paints). Intermediate products are also sometimes stored outdoors before shipment or further manufacturing. These products may have residues of oils, solvents and metal particles, which are potential sources of pollutants to storm water discharges. Similarly, scrap metal will have the same residues, and is almost always stored outdoors in bins before being sold to scrap metal recyclers.

The manufacturing process produces several types of hazardous and nonhazardous wastes. Hazardous wastes including paint wastes, solvent wastes, and sludge wastes are generated in small quantities at the facilities within this industrial group. Paint wastes result from painting operations and consist of paints and paint thinners. Solvent wastes result from metal cutting, shaping, and cleaning operations. As the metals are manufactured into different parts and treated with various chemicals, the different assembly parts must be cleaned with solvents to remove any chemical residues and rinsed with water. The metal parts are subject to more cleaning with detergents to remove the solvents and chemical residues and rinsed again with water to remove the detergents. Sludge wastes are generated when wastewater discharges from painting, plating, finishing and parts cleaning operations are treated, and is generally shipped offsite for disposal. Hazardous wastes are stored in 55 gallon drums outdoors before shipment and may be exposed to storm water discharges.

Nonhazardous wastes from this industry group include glass, tires, used wooden pallets, used equipment and machinery, as well as plastics and rubber wastes. All of these waste materials are stored outdoors and have the potential to pollute storm water discharges. Storm water runoff from these materials could include solids, oils, solvents and other pollutants generated in the manufacturing process.

Air emissions from stacks and ventilation systems are potential areas for exposure of materials to storm water discharges. Facilities which have high levels of engine exhaust from the manufacturing equipment, paint residue, and particulates in fumes from metal processing activities such as cutting, grinding, shaping, and welding, are subject to having particulate in the air emissions that may pollute storm water discharges.

Material handling activities such as loading and unloading areas may be exposed to storm water discharges. These are areas where significant materials are received and shipped at the facilities. Exposure of these materials to storm water may be minimized by having shipping/receiving areas under cover.

For those facilities engaged in fueling and vehicle maintenance, gasoline and diesel fuel are frequently stored outdoors in aboveground storage tanks and 55 gallon drums. Most vehicles and equipment also require oil, hydraulic

fluids, antifreeze, and other fluids that may leak and contaminate storm water discharges. The discharges from these areas are addressed elsewhere in today's proposed permit.

2. Pollutants Found in Storm Water Discharges From Facilities Which Manufacture Transportation Equipment, Industrial or Commercial Machinery

The impact of industrial activities at facilities which manufacture transportation equipment, industrial or commercial machinery on storm water discharges will vary. Factors at a site which influence the water quality include geographic location, hydrogeology, the industrial activities exposed to storm water discharges, the facility's size, the types of pollution prevention measures/best management practices in place, and the type, duration, and intensity of storm events. Taken together or separately, these factors determine how polluted the storm water discharges will be at a given facility. For example, scrap piles may be a significant source of pollutants at some facilities, while particulate stack emissions may be the primary pollutant source at others. Additionally, pollutant sources other than storm water, such as illicit connections, spills, and other improperly dumped materials, may increase the pollutant loading discharged into Waters of the United States.

Table AB–1 lists industrial activities that commonly occur at transportation equipment, industrial or commercial machinery manufacturers, the pollutant sources at these facilities, and pollutants that are associated with these activities. Table AB–1 identifies oil and grease, TSS, organics, and other parameters as potential pollutants of concern associated with facilities covered by this section.

TABLE AB–1.—DESCRIPTION OF INDUSTRIAL ACTIVITIES, POTENTIAL POLLUTANT SOURCES, AND POSSIBLE POLLUTANTS

Activity	Pollutant source	Pollutants
Outdoor Material Loading/Unloading .	Wooden pallets, castings, foundry sand, limestone, spills/leaks from material handling equipment, solvents.	TSS, turbidity, dust, oil and grease, organics.
Outdoor Material and Equipment Storage.	Foundry sand, limestone, used equipment, above ground tanks, scrap metal, oil and grease, raw materials (e.g., aluminum, steel, iron, copper), castings, solvents, acids, and paints.	TSS, turbidity, dust, oil and grease, heavy metals, and organics.

Source: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991 through December 31, 1992.

Part 2 group application data that was statistically summarized indicated large variations in the minimum and maximum values reported for each of the eight conventional pollutants monitored:

- Oil and grease samples ranged from 0 mg/L to 233 mg/L.
- Grab sample values for Total Suspended Solids (TSS) ranged from 0 mg/L to 6,453 mg/L, and flow-weighted composite sample values ranged from 0 mg/L to 3,600 mg/L.
- Grab samples for Chemical Oxygen Demand (COD) ranged from 0 mg/L to 940 mg/L.

The remaining conventional pollutants sampled also varied in their minimum and maximum values. However, the values were typically low relative to other sectors in today's proposed permit. As discussed in greater detail in the monitoring section of this section, part 2 data indicates that the high levels of pollutants at some facilities are atypical to those experienced by the majority of facilities which manufacture transportation equipment, industrial or commercial machinery. Table AB–2 indicates the sampling results for the conventional pollutants that were statistically analyzed by EPA. This table indicates the minimum and maximum values, means, medians, 95th percentiles, 99th percentiles, and the total number of samples analyzed for each of the conventional pollutants. Part 2 data which has not been statistically summarized is generally consistent with the values reported in Table AB–2.

Group applicants were only required to sample for metals if the facility knew or had reason to believe they would be present in the discharge. Part 2 data indicated that facilities which sampled for metals generally reported low values compared to the most stringent storm water effluent guideline limitations.

TABLE AB–2.—STATISTICS FOR CONVENTIONAL POLLUTANTS IN STORM WATER[i]

[mg/L, except as noted]

Pollutant	# of Samples		Mean		Minimum		Maximum		Median		95th Percentile		99th Percentile	
Sample Type	Grab	Comp[ii]	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD_5	182	179	13.0	7.3	0.0	0.0	513.0	226.0	6.0	5.0	32.0	19.0	194.0	76.0
COD	174	169	66.9	46.6	0.0	0.0	940.0	610.0	36.0	29.0	310.0	149.2	570.0	334.0
Nitrate+Nitrite Nitrogen	184	174	1.20	1.28	0.0	0.0	19.2	28.0	0.575	0.450	5.0	4.5	8.80	25.6
Total Kjeldahl Nitrogen	170	165	2.47	1.81	0.00	0.0	55.0	30.0	1.3	1.1	5.8	4.75	41.0	20.0
Oil and Grease	189	N/A	7.8	N/A	0.0	N/A	223.0	N/A	0.0	N/A	34.0	N/A	190.0	N/A
pH (s.u.)	179	N/A	N/A	N/A	4.1	N/A	9.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus	176	172	0.29	0.4	0.0	00.0	4.3	13.0	0.14	0.13	1.0	1.12	2.8	11.5
Tot. Suspended Solids	173	169	163	100	0	0	6453	3600	30	17	576	319	3700	1868

[i] Applicants that did not report the units of measurement for the reported values of pollutants were not included in these statistics.

[ii] Composite samples.

Chemical Oxygen Demand (COD), pH, Oil and grease, and Total Suspended Solids (TSS) are conventional pollutants commonly associated with the industrial activities and materials used onsite at these manufacturing facilities. The data included in part 2 of the application indicate that the potential for discharges to contain significant levels of pollutants does not justify analytical analysis of storm water discharges under this permit from transportation equipment, industrial and commercial machinery manufacturers.

• Chemical Oxygen Demand (COD)—COD measures the total amount of oxygen necessary for oxidation. COD is an effective indicator of levels of biologically resistant organic substances. Higher COD levels, for example, may be attributed to the presence of biologically resistant organics, such as oil and grease. The statistically summarized part 2 data indicated the following results concerning COD at facilities which manufacture transportation equipment, industrial, or commercial machinery:

• Approximately 6 percent of the sampling facilities reported COD higher than 150 mg/L.

• The mean concentrations for grabs and composites were approximately 66.9 mg/L and 46.6 mg/L, respectively.

• The median concentrations for grabs and composites were approximately 36 mg/L and 29 mg/L, respectively.

• The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 310 mg/L and 149.2 mg/L, respectively.

• The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composite were 570 mg/L and 334 mg/L, respectively.

A review of additional part 2 data also revealed COD levels frequently below the most stringent storm water effluent guideline limitations. Therefore, EPA does not believe it is necessary to impose monitoring of COD.

• *Oil and Grease*—There are several sources of oil and grease from transportation equipment, industrial or commercial machinery manufacturing facilities. These sources include unloading/loading areas; vehicle/equipment maintenance and cleaning; and outdoor storage of vehicles, equipment and castings. Oil and grease emulsions are detrimental to aquatic organisms and inhabitants because: (1) deposition of oil and grease in bottom sediments can serve to inhibit normal benthic growths, impacting the aquatic food chain; (2) oil and grease emulsion may destroy algae or other plankton; (3) oil and grease emulsions may adhere to the gills of fish exerting a toxic effect to fish; and (4) water insoluble components damage the plumage and coats of aquatic animals and fowls. Floating oil may reduce the re-aeration of the water surface, and in conjunction with emulsified oil, may interfere with photosynthesis. In addition to environmental impacts, oil and grease impact the aesthetic qualities of water by forming unsightly surface slicks that affect water beaches and shorelines.

Part 2 oil and grease data that was statistically summarized for facilities which manufacture transportation equipment, industrial or commercial machinery indicate the following:

• The mean concentration was 7.5 mg/L.

• The 95th percentile concentration (i.e., 95 percent of the values are below) was 34 mg/L.

• The 99th percentile concentration (i.e., 99 percent of the values are below) was 190 mg/L.

The most stringent storm water effluent guidelines establish a limit of 15 mg/L of oil and grease in a discharge.[130] The statistically summarized part 2 data indicates that the mean and median concentration of oil and grease are below this limit and, therefore, EPA does not believe it is necessary to impose continued monitoring for oil and grease. Further supporting EPA's belief that oil and grease are not a pollutant of concern, a review of additional part 2 data revealed oil and grease values typically below the 15 mg/L limit established by the most stringent storm water effluent guideline limitations.

• *pH*—pH is a measure of the acidity or alkalinity of a discharge. On the pH scale ranging from zero to fourteen, a value of seven represents neutral conditions in which the concentrations of hydrogen and hydroxyl ions are equal. Values of pH less than seven represent acidic conditions; values greater than seven represent basic conditions.

The pH level is easily measured and is an indication of potential environmental impacts. Storm water discharges with pH values markedly different from the pH values of the receiving stream are potentially detrimental to the environment. At outfalls and prior to complete mixing of storm water discharges with receiving waters, a zone of sudden pH change can damage or kill biota engulfed in the zone of change.

[130] Per 40 CFR part 419.

Statistically summarized part 2 data indicate that approximately 5 percent of the sampling facilities reported a pH below 6.

The part 2 data indicates that pH concentration levels are inside the permitted range for wastewater discharges under effluent limitation guidelines. Additional part 2 data revealed a high frequency of pH values within the permitted range of wastewater discharges. Therefore, EPA does not believe monitoring for pH is justified.

• *Total Suspended Solids (TSS)*—TSS is associated with facilities which manufacture transportation equipment, industrial or commercial machinery because their sites are sparsely vegetated, and have a low percentage of impervious land areas and, therefore, are unstabilized. TSS in storm water discharges from these types of manufacturing facilities primarily consists of inorganic materials such as sand, silt, and limestone. Because suspended solids increase the turbidity of water, less light is able to penetrate the water, reducing photosynthetic activity of aquatic vegetation. Over time, total suspended solids settle out to form deposits that can be detrimental to stream environments. These deposits may destroy fauna that breed and grow in or near the bottoms of streams and serve as food for fish and other aquatic life. The deposits can also blanket and destroy spawning grounds for fish. The statistically summarized part 2 data indicated the following results concerning TSS from facilities which manufacture transportation equipment, industrial or commercial machinery:

• Approximately 5 percent of the sampling facilities reported TSS levels above 548 mg/L.

• The mean concentrations for grabs and composites were approximately 163 mg/L and 100 mg/L, respectively.

• The median concentrations for grabs and composites were approximately 30 mg/L and 17 mg/L, respectively.

• The 95th percentile concentration (i.e., 95 percent of the values are below) for grabs and composites were approximately 576 and 319, respectively.

• The 99th percentile concentration (i.e., 99 percent of the values are below) for grabs and composite were 3,700 mg/L and 1,868 mg/L, respectively.

A review of additional part 2 data showed TSS values generally below the 168 mg/L grab sample mean concentration. Therefore, data submitted in part 2 applications does not support continued monitoring of TSS.

• *Heavy Metals*—EPA is not proposing to require monitoring of metals by facilities covered under this section of today's proposed permit. As required by 40 CFR 122.26 (g)(ii) and (iii), group applicants were only required to sample for metals if the facility knew or had reason to believe they would be expected in the discharge. Of the part 2 data which was statistically summarized, less than 10 percent of the facilities submitting data reported on heavy metals.

EPA considers the high levels of heavy metals reported by certain facilities to be atypical of those experienced by the majority of facilities which manufacture transportation equipment, industrial or commercial machinery. Part 2 data indicated that facilities sampling for heavy metals typically reported concentrations below the most stringent storm water effluent guideline limitations. Therefore, EPA does not believe it is necessary to impose monitoring for heavy metals.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology)]. The Agency does not believe that it is appropriate to establish specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from facilities which manufacture transportation equipment, industrial or commercial machinery to meet BAT/BCT standards of the Clean Water Act. Instead, this section establishes requirements for the development and implementation of site-specific storm water pollution prevention plans consisting of a set of Best Management Practices (BMPs) that are sufficiently flexible to address different sources of pollutants at different sites.

Certain BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges. The types of BMPs implemented will depend on the type of discharge, types and concentrations of contaminants, and the volume of the flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with transportation equipment, industrial or commercial machinery manufacturers.

Part 1 group application data indicate that BMPs have not been widely implemented at the representative sampling facilities. Less than 25 percent of the sampling subgroup reported that they store some materials indoors; less than 10 percent cover loading areas, dumpsters, drums, or above ground tanks; less than 5 percent of the representative facilities utilize waste minimization practices (e.g., recycling or reusing materials).[131] Because BMPs described in part 1 data are limited, the following table is provided to identify BMPs associated with activities that routinely occur at facilities which manufacture transportation equipment, industrial or commercial machinery.

TABLE AB–3.—GENERAL STORM WATER BMPS FOR FACILITIES WHICH MANUFACTURE TRANSPORTATION EQUIPMENT, INDUSTRIAL, OR COMMERCIAL MACHINERY

Activity	Best management practices (BMPs)
Outdoor unloading and loading	Confine loading/unloading activities to a designated area. Consider performing loading/unloading activities indoors or in a covered area. Consider covering loading/unloading area with permanent cover (e.g., roofs) or temporary cover (e.g., tarps). Close storm drains during loading/unloading activities in surrounding areas. Avoid loading/unloading materials in the rain. Inspect the unloading/loading areas to detect problems before they occur. Inspect all containers prior to loading/unloading of any raw or spent materials. Consider berming, curbing, or diking loading/unloading areas. Use dry clean-up methods instead of washing the areas down. Train employees on proper loading/unloading techniques.
Outdoor material storage (including waste, and particulate emission management).	Confine storage of materials, parts, and equipment to designated areas. Consider curbing, berming, or diking all liquid storage areas. Train employees on proper waste control and disposal. Consider covering tanks. Ensure that all containers are closed (e.g., valves shut, lids sealed, caps closed). Wash and rinse containers indoors before storing them outdoors. If outside or in covered areas, minimize runon of storm water by grading the land to divert flow away from containers. Inventory all raw and spent materials. Clean around vents and stacks.

[131] These percentages were based on the information reported in the Part 1 group applications. However, some facilities which utilize these BMPs as part of their daily activities may not recognize these practices as BMPs and as a result did not report this information in their applications.

TABLE AB–3.—GENERAL STORM WATER BMPS FOR FACILITIES WHICH MANUFACTURE TRANSPORTATION EQUIPMENT, INDUSTRIAL, OR COMMERCIAL MACHINERY—Continued

Activity	Best management practices (BMPs)
	Place tubs around vents and stacks to collect particulate. Inspect air emission control systems (e.g., baghouses) regularly, and repair or replace when necessary. Store wastes in covered, leak proof containers (e.g., dumpsters, drums). Consider shipping all wastes to offsite landfills or treatment facilities. Ensure hazardous waste disposal practices are performed in accordance with Federal, State, and local requirements.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991 through December 31,1992.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

4. Special Conditions

There are no additional requirements under this section other than those stated in the general fact sheet language.

5. Storm Water Pollution Prevention Plan Requirements

EPA believes that pollution prevention is the most effective approach for controlling contaminated storm water discharges from facilities which manufacture transportation equipment, industrial or commercial machinery. The requirements included in the pollution prevention plans provide a flexible framework for the development and implementation of site-specific controls to minimize the pollutants in storm water discharges. This flexibility is necessary because each facility is unique in that the source, type, and volume of contaminated storm water discharge will vary from site to site.

Under today's proposed permit, all facilities must prepare and implement a storm water pollution prevention plan. The pollution prevention plan requirement reflects EPA's decision to allow operators of transportation equipment, industrial or commercial machinery manufacturing facilities to utilize BMPs as the BAT/BCT level of control for the storm water discharges covered by this section. The pollution prevention plan requirements in this section are consistent with EPA's storm water general permits finalized on September 9, 1992 (57 FR 41236), and September 25, 1992 (57 FR 44438), for discharges in nonauthorized NPDES States.

There are two major objectives to a pollution prevention plan: (1) To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from a facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activity from a facility.

Specific requirements for a pollution prevention plan for transportation equipment, industrial or commercial machinery manufacturing facilities are described below. These requirements must be implemented in addition to the baseline pollution prevention plan provisions discussed previously.

a. Contents of the plan. Storm water pollution prevention plans are intended to aid operators of transportation equipment, industrial or commercial machinery manufacturing facilities to evaluate all potential prevention sources at a site, and assist in the selection and implementation of appropriate measures designed to prevent, or control, the discharge of pollutants in storm water runoff. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, 1992, (EPA 832–R–92–006) to assist permittees in developing and implementing pollution prevention measures.

(1) Description of potential pollutant sources. Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute pollutants to storm water runoff or, during periods of dry weather, result in dry weather flows. This assessment of potential storm water pollutant source will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Plans must describe the following elements:

(a) Site map—The plan must contain a map of the site that shows the pattern of storm water drainage, structural and nonstructural features that control pollutants in storm water runoff and process wastewater discharges, surface water bodies (including wetlands), places where significant materials[132] are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map must also indicate the direction of storm water flow. An outline of the drainage area for each outfall must be provided; and the location of each outfall and monitoring points must be indicated. An estimation of the total site acreage utilized for each industrial activity (e.g., storage of raw materials, waste materials, and used equipment) must be provided. These areas include liquid storage tanks, stockpiles, holding bins, used equipment, and empty drum storage. These areas are considered to be significant potential sources of pollutants at facilities which manufacture transportation equipment, industrial or commercial machinery.

(b) Inventory of exposed materials—Facility operators are required to carefully conduct an inspection of the site to identify significant materials that are or may be exposed to storm water discharges. The inventory must address materials that within 3 years prior to the effective date of this permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or

[132] Significant materials include, "* * * but [are] not limited to: Raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; . . . hazardous substances designated under section 101(14) of CERCLA; any chemical facilities are required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge." (40 CFR 122.26(b)(12)). Significant materials commonly found at transportation equipment, industrial or commercial machinery manufacturing facilities include raw and scrap metals; solvents; used equipment; petroleum based products; waste materials or by-products used or created by the facility.

disposal; practices used to minimize contact of materials with precipitation and runoff; existing structural and nonstructural controls that reduce pollutants in storm water; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or through a separate storm sewer system. The description must be updated whenever there is a significant change in the type or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(c) Significant spills and leaks—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of CWA (see 40 CFR Section 110.10 and Section 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR Section 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

(d) Non-storm water discharges—Each pollution plan must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Pollution prevention plans must identify and ensure the implementation of appropriate pollution prevention measures for any non-storm water discharges.

(e) Sampling data—Any existing data describing the quality or quantity of storm water discharges from the facility must be summarized in the plan. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

(f) Summary of potential pollutant sources—The description of potential pollutant sources should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: raw materials (liquid storage tanks, stockpiles, holding bins), waste materials (empty drum storage), and used equipment storage areas. The assessment must list any significant pollutant parameter(s) (i.e., total suspended solids, oil and grease, etc.) associated with each source.

(2) Measures and controls. Permittees must select, describe, and evaluate the pollution prevention measures, BMPs, and other controls that will be implemented at the facility. Source reduction measures include preventive maintenance, spill prevention, good housekeeping, training, and proper materials management. If source reduction is not an option, EPA supports the use of source control measures. These include BMPs such as material covering, water diversion, and dust control. If source reduction or source control are not available, then recycling or waste treatment are other alternatives. Recycling allows the reuse of storm water, while treatment lowers pollutant concentrations prior to discharge. Since the majority of transportation equipment, industrial or commercial machinery manufacturing occurs indoors, the BMPs identified above are geared towards only those activities occurring outdoors or otherwise have a potential to contribute pollutants to storm water discharges.

Pollution prevention plans must discuss the reasons each selected control or practice is appropriate for the facility and how each of the potential pollutant sources will be addressed. Plans must identify the time during which controls or practices will be implemented, as well the effect the controls or practices will have on storm water discharges from the site. At a minimum, the measures and controls must address the following components:

(a) Good housekeeping—Permittees must describe protocols established to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. Specifics of this plan must be communicated to appropriate plant personnel.

(b) Preventive maintenance—Permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. Inspections should assess the effectiveness of the storm water pollution prevention plan. They allow facility personnel to monitor the components of the plan on a regular basis. The use of a checklist is encouraged, as it will ensure that all of the appropriate areas are inspected and provide documentation for recordkeeping purposes.

(c) Spill prevention and response procedures—Permittees are required to identify proper material handling procedures, storage requirements, containment or diversion equipment, and spill removal procedures to reduce exposure of spills to storm water discharges. Areas and activities which are high risks for spills at transportation equipment, industrial or commercial machinery manufacturing facilities include raw material unloading and product loading areas, material storage areas, and waste management areas. These activities and areas and their drainage points must be described in the plan.

(d) Inspections—Qualified personnel must inspect designated equipment and areas of the facility at the proper intervals specified in the plan. The plan should identify areas which have the potential to pollute storm water for periodic inspections. Records of inspections must be maintained onsite.

(e) Employee training—Permittees must describe a program for informing and educating personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. A schedule for conducting this training should be provided in the plan. Where appropriate, contractor personnel must also be trained in relevant aspects of storm water pollution prevention. Topics for employee training should include good housekeeping, materials management, and spill response procedures.

(f) Recordkeeping and internal reporting procedures—Permittees must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. This includes the success and failure of BMPs implemented at the facility.

(g) Sediment and erosion control—Permittees must identify areas, due to topography, activities, soils, cover materials, or other factors that have a high potential for soil erosion. Measures to eliminate erosion must be identified in the plan.

(h) Management of runoff—Permittees must provide an assessment of traditional storm water management practices that divert, infiltrate, reuse, or otherwise manage storm water so as to reduce the discharge of pollutants. Based on this assessment, practices to control runoff from these areas must be

identified and implemented as required by the plan.

(3) Comprehensive site compliance evaluation. The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to: (1) confirm the accuracy of the description of potential sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of this section. Comprehensive site compliance evaluations must be conducted once a year for transportation equipment, industrial or commercial machinery manufacturing facilities. The individual(s) who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, never more than 12 weeks after completion of the inspection.

6. Numeric Effluent Limitation

There are no additional requirements under this section other than those stated in the general fact sheet language.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44 (i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities that manufacture transportation equipment, industrial, or commercial machinery. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspections of a storm water discharge from each outfall are required at transportation equipment, industrial, or commercial machinery manufacturing facilities. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspections must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for facilities that manufacture transportation equipment, industrial, or commercial machinery. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

8. Cost Estimates

There are no additional requirements under this section other than those stated in the general fact sheet language.

AC. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods

1. Discharges Covered Under This Section

This sector covers storm water discharges associated with industrial activity from facilities in major Standard Industrial Classification (SIC) groups 36 and 38, and industrial group 357.

Major SIC group 36 includes manufacturers of a broad range of electronic and electrical equipment and components, not including computer equipment. Specifically, this group includes manufacturers of electricity distribution equipment such as transformers and switch-gear, electrical industrial equipment such as motors and generators, household appliances, electric lighting and wiring equipment such as light bulbs and lighting fixtures, and audio and video equipment including phonograph records and audio tapes and disks. Also included are manufacturers of communication

equipment including telephone and telegraph equipment, radio and television equipment, electronic components such as printed circuit boards and semiconductors and related devices, and miscellaneous electrical items such as batteries and electrical equipment for automobiles.

Major SIC group 38 includes manufacturers of measuring, analyzing, and controlling instruments, photographic, medical and optical goods, and watches and clocks. Specifically, this group includes facilities which manufacture search, detection, navigation, or guidance systems such as radar and sonar equipment, measurement and control instruments and laboratory apparatus, surgical, medical and dental instruments and supplies, photographic equipment and supplies, and watches and clocks.

Computer and office equipment is included in industrial SIC group 357. This group includes manufacturers of computers, computer storage devices, and peripheral equipment for computers such as printers and plotters. Manufacturers of miscellaneous office machines are also included in this group.

The SIC codes of the facilities covered by this section are in category (xi) of the definition of storm water discharges associated with industrial activity. Storm water discharges from facilities in this category are only regulated where precipitation and storm water runon come into contact with areas associated with industrial activities, and significant materials. Significant materials include, but are not limited to, raw materials, waste products, fuels, finished products, intermediate products, by-products, and other materials associated with industrial activities.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Pollutants Found in Storm Water Discharges

a. Sources of pollutants. As discussed above, the SICs of the facilities in this sector fall into category (xi) of the definition of "storm water associated with industrial activity" found at 40 Code of Federal Regulations (CFR) 122.26(b)(14). As noted in the preamble to the final storm water regulations of November 16, 1990, most of the actual manufacturing and processing activity at these types of facilities normally occurs indoors (55 FR 48008).

Additional information concerning these manufacturing processes and the industrial sector itself can be found in the following documents:

- "Development Document for Effluent Limitations Guidelines and Standards for the Electrical and Electronics Components Point Source Category, Phase I," EPA 440/1–83/075.
- "Development Document for Effluent Limitations Guidelines and Standards for the Electrical and Electronic Components Point Source Category, Phase II," EPA 440/1–84/075.
- "Development Document for Existing Source Pretreatment Standards for the Electroplating Point Source Category," EPA 440/1–79/003.
- "Development Document for Effluent Limitations Guidelines and Standards for the Metal Finishing Point Source Category," EPA 440/1–83/091.

The types of activities at these facilities where exposure to storm water may occur consist primarily of loading/unloading activities, and the storage and handling of raw materials, by-products, final products or waste products. A wide variety of materials are used at these facilities including metals, acids used for chemical etching, alkaline solutions, solvents, various oils and fuels and miscellaneous chemicals. Tanks or drums of these materials may be exposed to storm water during loading/unloading operations, or through outdoor storage or handling at some facilities.

Liquid wastes which may be exposed at least temporarily include spent solvents and acids, miscellaneous chemicals and oily wastes. These wastes may be contaminated with a variety of heavy metals and chlorinated hydrocarbons. Used equipment, scrap metal and wire, soiled rags and sanding materials may also be exposed to storm water and constitute a potential source of pollutants. In addition, some facilities reported that dumpsters containing non-hazardous wastes or manufacturing debris may be exposed to storm water.

Table AC–1 lists potential pollutant sources from activities that commonly take place at facilities which manufacture electronic and electrical equipment and components, photographic and optical goods.

TABLE AC–1.—COMMON POLLUTANT SOURCES

Activity	Pollutant source	Pollutants
Outdoor Material Loading/Unloading .	Wooden pallets, spills/leaks from material handling equipment, raw materials, finished products, solvents.	TSS, oil and grease, organics.
Outdoor Material and Equipment Storage.	Sulfuric acid, alkaline solutions, solvents, miscellaneous chemicals, oily wastes, lead, silver, copper, zinc, spent solvents and acids, scrap metal and wire, oily rags.	Organics, oil and grease, acids, alkalinity, heavy metals.

b. Storm water sampling results. Tables AC–2 and AC–3 summarize the storm water monitoring results for the basic parameters which were reported by facilities in this sector. Table AC–2 provides composite sample data and Table AC–3 provides the grab sample results.

TABLE AC–2.—COMPOSITE SAMPLE RESULTS

Pollutant	Units	Number of Samples	Mean	Min	Max	Median	95th Perc.	99th Perc.
BOD_5	mg/L	64	8.81	1.0	139.0	5.5	14.0	54.0
COD	mg/L	65	59.18	4.0	220.0	46.0	200.0	450.0
$NO_3 + NO_2$ nitrogen	mg/L	64	0.83	0.16	2.54	0.512	1.43	6.97
Total Kjeldahl nitrogen	mg/L	62	1.46	0.06	13.6	1.050	3.70	10.20
Oil and grease	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	s.u. ..	59	N/A	5.5	8.3	N/A	N/A	N/A
Total phosphorus	mg/L	64	7.43	0.01	44.4	0.132	1.2	80.10
TSS	mg/L	63	89.21	1.0	716.0	29.0	370.0	610.0

TABLE AC–3.—GRAB SAMPLE RESULTS

Pollutant	Units	Number of samples	Mean	Min	Max	Median	95th Perc.	99th Perc.
BOD_5	mg/L	64	8.81	0.0	54.0	5.50	32.0	54.0
COD	mg/L	65	59.18	0.0	450.0	46.0	170.0	450.0
$NO_3 + NO_2$ nitrogen	mg/L	64	0.83	0.00	6.97	0.512	2.8	6.97
Total Kjeldahl nitrogen	mg/L	62	1.46	0.0	10.2	1.05	4.29	10.20
Oil and grease	mg/L	59	0.56	0.00	9.0	0.0	5.0	9.0
pH	s.u ...	59	N/A	5.04	8.8	N/A	N/A	N/A
Total phosphorus	mg/L	64	1.50	0.01	80.1	0.132	1.1	80.10
TSS	mg/L	63	89.21	1.0	610.0	29.00	348.0	610.0

For the majority of the pollutants, the grab sample results are somewhat higher than the composite results indicating a moderate "first flush" effect. Overall, the results summarized in Table AC–3 do not differ substantially from the NURP results. As with the NURP results, these data indicate wide variability in the monitoring results.

EPA has also reviewed the monitoring results for nonconventional and priority toxic pollutants required by Parts B and C of Form 2F. Table AC–4 summarizes the results for parameters where at least some of the reported values exceeded NURP averages and may be a result of industrial activities at the facilities.

TABLE AC–4.—RESULTS FOR NONCONVENTIONAL AND PRIORITY TOXIC POLLUTANTS

Pollutant	Unit	Number of obs./detects grab samples	Range grab samples	Number of obs./detects comp. samples	Range composite samples	Range NURP
Copper	mg/L	54/24	0.00–1.00	50/14	0.00–.06	.001–.1
Lead	mg/L	60/24	0.00–.57	56/13	0.00–.17	0.006–.46
Silver	mg/L	52/4	0.00–0.01	48/3	0.00–0.01	0.0002–0.0008
Zinc	mg/L	51/38	0.00–1.1	48/37	0.00–1.2	.01–2.4

EPA contacted certain group members to try to determine more specifically the possible sources of the pollutants reported above. Copper is widely used in the manufacture of electrical products and was commonly detected in storm water samples. However, only one grab sample (10 mg/L) exceeded by a wide margin the weighted mean for copper (.43 mg/L) in Table AC–3 reported by the NURP study. In this case the cooper was thought to be a result of leaks associated with the maintenance of a waste tank containing copper. Other readings for copper which exceeded the NURP average were thought to result from factors such as the leaching of old pipes or from soils naturally high in copper.

One grab sample was reported in which lead was detected at a level (0.57 mg/L) which exceeded the range reported in the NURP study. However, the facility in question could not explain the result and indicated that minimal amounts of lead are used at the facility. Facilities which reported elevated levels in zinc were also uncertain as to the source; however, leaching of old pipes was suggested as a possibility.

One facility reported a concentration of 0.01 mg/L for silver in storm water runoff. Although a special silver based solder is used onsite, the facility could still not explain the monitoring result.

Facilities in this sector utilize and also conducted sampling for a wide variety of nonconventional and priority toxic pollutants in addition to those listed above. While the sampling results did not indicate any special concerns with regards to other pollutants, it should be noted that the above results are based on the limited sampling activity required by the group application regulations (40 CFR 122.26(c)(2)). Therefore, it would be premature to conclude that the above pollutants are the only pollutants that could ever be present at benchmark levels in the storm water discharges from facilities in this sector.

3. Options for Controlling Pollutants

In evaluating options for controlling pollutants in storm water discharges, EPA must achieve compliance with the technology-based standards of the Clean Water Act [Best Available Technology (BAT) and Best Conventional Technology)]. The Agency does not believe that it is appropriate to establish

specific numeric effluent limitations or a specific design or performance standard in this section for storm water discharges associated with industrial activity from facilities which manufacture electronic and electrical equipment and components, and photographic and optical goods to meet BAT/BCT standards of the Clean Water Act. Instead, this section establishes requirements for the development and implementation of site-specific storm water pollution prevention plans consisting of a set of Best Management Practices (BMPs) that are sufficiently flexible to address different sources of pollutants at different sites.

Certain BMPs are implemented to prevent and/or minimize exposure of pollutants from industrial activities to storm water discharges. EPA believes the most effective BMPs for reducing pollutants in storm water discharges are exposure minimization practices. Exposure minimization practices lessen the potential for storm water to come into contact with pollutants. Good housekeeping practices ensure that facilities are sensitive to routine and nonroutine activities which may increase pollutants in storm water discharges. The BMPs which address good housekeeping and exposure minimization are easily implemented, inexpensive, and require little, if any, maintenance. BMP expenses may include construction of roofs for storage areas or other forms of permanent cover and the installation of berms/dikes. Other BMPs such as detention/retention ponds and filtering devices may be needed at these facilities because of the contaminant level in the storm water discharges. The types of BMPs implemented will depend on the type of discharge, types and concentrations of contaminants, and the volume of the flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with manufacturers of electronic and electrical equipment and components, and photographic and optical goods.

Part 1 group application data indicated that the most widely implemented BMPs are spill prevention and response techniques (used by approximately 68 percent of the sampling facilities) and waste minimization practices (employed by approximately 54 percent of the sampling facilities). However, less than 30 percent of the sampling subgroup reported that they use covering; approximately 3 percent have roofs over their raw materials; and less than 3 percent store raw materials indoors.[133] Because BMPs described in part 1 data are generally limited, Table AC–5 is provided to identify BMPs associated with activities that routinely occur at manufacturers of electronic and electrical equipment and components, and photographic and optical goods.

TABLE AC–5.—GENERAL STORM WATER BMPS FOR MANUFACTURERS OF ELECTRONIC AND ELECTRICAL EQUIPMENT AND COMPONENTS, PHOTOGRAPHIC AND OPTICAL GOODS

Activity	Best management practices (BMPs)
Outdoor Unloading and Loading	Confine loading/unloading activities to a designated area. Consider performing loading/unloading activities indoors or in a covered area. Consider covering loading/unloading area with permanent cover (e.g., roofs) or temporary cover (e.g., tarps). Close storm drains during loading/unloading activities in surrounding areas. Avoid loading/unloading materials in the rain. Inspect the unloading/loading areas to detect problems before they occur. Inspect all containers prior to loading/unloading of any raw or spent materials. Consider berming, curbing, or diking loading/unloading areas. Dead-end sump where spilled materials could be directed. Drip pans under hoses. Use dry clean-up methods instead of washing the areas down. Train employees on proper loading/unloading techniques and spill prevention and response.

[133] These percentages were based on the information reported in the Part 1 group applications. However, some facilities which utilize these BMPs as part of their daily activities may not recognize these practices as BMPs and as a result did not report this information in their applications.

TABLE AC–5.—GENERAL STORM WATER BMPS FOR MANUFACTURERS OF ELECTRONIC AND ELECTRICAL EQUIPMENT AND COMPONENTS, PHOTOGRAPHIC AND OPTICAL GOODS—Continued

Activity	Best management practices (BMPs)
Outdoor Material Storage (including waste, and particulate emission management).	Confine storage of materials, parts, and equipment to designated areas. Consider secondary containment using curbing, berming, or diking all liquid storage areas. Train employees in spill prevention and response techniques. Train employees on proper waste control and disposal. Consider covering tanks. Ensure that all containers are closed (e.g., valves shut, lids sealed, caps closed). Wash and rinse containers indoors before storing them outdoors. If outside or in covered areas, minimize runon of storm water by grading the land to divert flow away from containers. Leak detection and container integrity testing Direct runoff to onsite retention pond. Inventory all raw and spent materials. Clean around vents and stacks. Place tubs around vents and stacks to collect particulate. Inspect air emission control systems (e.g., baghouses) regularly, and repair or replace when necessary. Store wastes in covered, leak proof containers (e.g., dumpsters, drums). Consider shipping all wastes to offsite landfills or treatment facilities. Ensure hazardous waste disposal practices are performed in accordance with Federal, State, and local requirements.

Sources: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991, through December 31, 1992.
EPA, Office of Water. September 1992. "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices." EPA 832–R–92–006.

4. Special Conditions

There are no additional requirements under this section other than those stated in Part VI.B of this fact sheet.

5. Storm Water Pollution Prevention Plan Requirements

There are no additional requirements beyond those described in Part VI.C. of this fact sheet.

6. Numeric Effluent Limitations

No numeric effluent limitations are proposed for facilities in this sector, beyond those described in Part VI.F. of this fact sheet.

7. Monitoring and Reporting Requirements

a. Monitoring requirements. The regulatory modifications at 40 CFR 122.44(i)(2) established on April 2, 1992, grant permit writers the flexibility to reduce monitoring requirements in storm water discharge permits. EPA has determined that the potential for storm water discharges to contain pollutants above benchmark levels, because of the industrial activities and materials exposed to precipitation, does not support sampling at facilities that manufacture electronic and electrical equipment and components, photographic, and optical goods. Based on a consideration of the BMPs typically used at these facilities, and generally low pollutant values from the application data, EPA believes that the pollution prevention plan with visual observations of storm water discharges will help to ensure storm water contamination is minimized. Because permittees are not required to conduct sampling, they will be able to focus their resources on developing and implementing the pollution prevention plan.

Quarterly visual inspection of a storm water discharge from each outfall are required. The inspection must be of a grab sample collected from each storm water outfall. The examination of storm water grab samples shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on these samples.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to runoff. EPA expects that, whenever practicable, the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February; March to May; June to August; September to November. Grab samples shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. Reports of the visual observation include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The visual observation reports must be maintained onsite with the pollution prevention plan.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. The frequency of this visual inspection will also allow for timely adjustments to be made to the plan. If BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on inspection will enhance the staff's understanding of the storm water problems on that site and the effects of the management practices that are included in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include

weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

As discussed above, EPA does not believe that chemical monitoring is necessary for facilities that manufacture electronic and electrical equipment and components, photographic, and optical goods. EPA believes that between quarterly visual inspections and site compliance evaluations potential sources of contaminants can be recognized, addressed, and then controlled with BMPs. In determining the monitoring requirements, EPA considered the nature of the industrial activities and significant materials exposed at these sites, and performed a review of data provided in Part 2 group applications.

8. Alternative Monitoring Requirements

EPA requests comment upon the following monitoring and reporting requirements in lieu of those listed in Part XI.AC. of today's proposed permit.

a. Annual monitoring requirements. During the period beginning on the effective date and lasting through the expiration date of this permit, and except as provided in VI.E.3., 6. and 7. (Sampling Waiver, Representative Discharge, and Alternative Certification), or VIII.AC.8.c. (Exemptions From Storm Water Monitoring), facilities covered under this section of the permit shall monitor storm water discharges associated with industrial activity once per year for the following pollutants:

- Oil and grease, COD, TSS, and pH;, and
- Any additional toxic pollutants that the permittee finds in the Description of Potential Pollutant Sources [Section VI.C.2 above] and may be present in storm water discharges in significant quantities.

Permittees must retain monitoring results in accordance with Part VI.E.4. (Retention of Records). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

b. Sample type. All samples shall be collected as grab samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

c. Exemptions from storm water monitoring. Storm water monitoring may be discontinued on a pollutant-by-pollutant basis for the pollutants specified in VIII.AC.8. above if two successive samples indicate that a particular pollutant is not present in significant quantities. Monitoring may be discontinued entirely if two successive samples indicate that no pollutants are found in significant quantities.

d. Quarterly visual examination of storm water runoff. (1) On a quarterly basis, permittees shall conduct a visual examination of storm water discharges from each outfall which discharges storm water associated with industrial activity. If the facility has two or more outfalls with substantially identical effluents (based on a consideration of industrial activity, significant materials, and management practices and activities in the area drained by the outfall), the visual examination may be conducted on only one such outfall.

(2) The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff event. Examinations shall be conducted in each of the following periods for purposes of inspecting storm water quality associated with storm water runoff and snow-melt: December to February (storm water runoff or snow-melt); March to May (storm water runoff); June to August (storm water runoff); and September to November (storm water runoff or snow-melt).

(3) Examinations shall be conducted within the first 30 minutes (or as soon thereafter as practical, but not to exceed 60 minutes) of when the runoff begins discharging. The examinations shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen or other obvious indications of storm water pollution. No analytical tests are required to be performed. Examinations shall be conducted so as to provide a reasonable representation of the nature of a typical storm water discharge at that site during that time of year.

(4) Information must be maintained onsite and include: the examination date and time, examination personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.

IX. Paperwork Reduction Act

EPA has reviewed the requirements imposed on regulated facilities in this proposed multi-sector general permit under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. The information collection requirements in today's permit have already been approved by the Office of Management and Budget (OMB) in previous submissions made for the NPDES permit program under the provisions of the Clean Water Act.

X. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., EPA is required to prepare a Regulatory Flexibility Analysis to assess the impact of rules on small entities. Under 5 U.S.C. 605(b), no Regulatory Flexibility Analysis is required, however, where the head of the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

Today's proposed permit will provide any small entity the opportunity to obtain storm water permit coverage as a result of the group application process. Group applications provided small entities a mechanism to reduce their permit application burden by grouping together with other industrial facilities and submitting a common permit application with reduced monitoring requirements and shared costs. The group application information submitted to EPA provided a basis for the development of storm water permit conditions tailored specifically for each industry. The permit requirements have been designed to minimize significant administrative and economic impacts on small entities and should not have a significant impact on industry in general. In addition, small entities and other industrial facilities are encouraged to review and comment on the terms and conditions of the proposed permit and assess the feasibility of permit compliance. Moreover, the proposed permit reduces a significant burden on regulated sources of applying for individual permits.

Accordingly, I hereby certify pursuant to 5 U.S.C. 605(b) that this permit will not have a significant impact on a substantial number of small entities.

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

Dated: October 19, 1993.

Paul G. Keough,

Acting Regional Administrator, Region I.

Dated: October 27, 1993.

Kathleen Callahan,

Acting Regional Administrator, Region II.

Dated: October 28, 1993.

Alvin R. Morris,

Acting Regional Administrator, Region 3.

Dated: October 26, 1993.

Patrick M. Tobin,

Acting Regional Administrator, Region 4.

Dated: October 27, 1993.

Joe D. Winkle,

Acting Regional Administrator, Region 6.

Dated: October 27, 1993.

Jack W. McGraw,

Acting Regional Administrator, Region 8.

Dated: October 28, 1993.

John Wise,

Regional Administrator, Region 9.

Dated: October 29, 1993.

Gerald A. Emison,

Regional Administrator, Region 10.

Authorization to Discharge Under the National Pollution Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq., the "Act") except as provided in part I.B.3. of this storm water multi-sector general permit, operators of point source discharges of storm water associated with industrial activity that discharge into waters of the United States, represented by the industry sectors identified in part XI. of this permit, are authorized to discharge in the areas of coverage listed below in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges from the industrial activities covered under this permit who intend to be authorized by this permit must submit an Notice of Intent (NOI) in accordance with part II.B. of this permit. Operators of storm water discharges associated with industrial activity who fail to submit an NOI with part II.B. of this permit are not authorized under this general multi-sector permit.

This permit shall become effective on *[leave blank]*, and shall expire at midnight on *[enter five years from effective date]*.

Region I

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Connecticut Indian Lands ..	CTR05*##F
Maine	MER05*###
Indian Lands	MER05*##F
Massachusetts	MAR05*###
Indian Lands	MAR05*##F
New Hampshire	NHR05*###
Indian Lands	NHR05*##F
Rhode Island Indian Lands	RIR05*##F
Vermont Indian Lands	VTR05*##F
Vermont Federal Facilities	VTR05*###

Region II

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
New York Indian Lands	NYR05*##F
Puerto Rico	PRR05*###
Virgin Islands Federal Facilities.	VIR05*##F

Region III

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
District of Columbia	DCR05*###
Delaware Federal Facilities	DER05*##F

Region IV

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Alabama Indian Lands	ALR05*##F
Florida	FLR05*###
Indian Lands	FLR05*##F
Mississippi Indian Lands ...	MSR05*##F
North Carolina Indian Lands.	NCR05*##F

Region VI

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Louisiana	LAR05*###
Indian Lands	LAR05*##F
New Mexico	NMR05*###
Indian Lands (except Navajo lands and (Ute Mountain Reservation lands).	NMR05*###
Oklahoma	OKR05*###
Indian Lands	OKR05*##F
Texas	TXR05*###
Indian Lands	TXR05*##

Region VIII

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Colorado Indian Lands	COR05*##F
Colorado Federal Facilities	COR05*##F
Montana Indian Lands	MTR05*##F
Nebraska Pine Ridge Reservation.	SDR05*###
New Mexico	
Ute Mountain Reservation.	COR05*##F
North Dakota Indian Lands except Lake Traverse Reservation (Sisseton Reservation).	NDR05*##F
Lake Traverse Reservation (Sisseton Reservation).	SDR05*##F
South Dakota	
All of South Dakota except for Standing Rock Reservation.	SDR05*###
Standing Rock Reservation.	NDR05*###
Utah Indian Lands (except Goshute Reservation and Navajo Reservation lands).	UTR05*##F
Wyoming Indian Lands	WYR5*##F

Region IX:

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Arizona	AZR05*###
Indian Lands	AZR05*##F
California	
Indian Lands	CAR05*##F
Idaho	
Duck Valley Reservation	NVR05*##F
New Mexico	
Navajo Reservation	AZR05*##F
Oregon	
Fort McDermitt Reservation.	NVR05*##F
Utah	
Goshute Reservation	NVR05*##F
Navajo Reservation	AZR05*##F
American Samoa	ASR05*###
Guam	GUR05*###
Johnston Atoll	JAR05*###
Midway Island and Wake Island.	MWR05*###
Commonwealth of the Northern Mariana Islands.	NIR05*###
Republic of Palau	TTR05*###

Region X:

Signed this ____ day of ____, 1994.
[To Be Signed When Final] _____
Water Management Division Director

Areas of coverage	Permit No.
Alaska	AKR05*###
Indian Lands	AKR05*##F
Federal Facilities	AKR05*###
Idaho	IDR05*###
Indian Lands (except Duck Valley Reservation lands).	IDR05*##F

Areas of coverage	Permit No.
Federal Facilities	IDR05*###
Oregon Indian Lands (except for Fort McDermitt Reservation lands).	ORR05*##F
Washington Indian Lands ..	WAR05*##I
Washington Federal Facilities.	WAR05*##F

NPDES General Permit for Storm Water Discharges From Industrial Activities

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Addenda
Addendum A—Pollutants Identified in Tables II and III of Appendix D of 40 CFR part 122

Addendum B—Notice of Intent (NOI) Form (an NOI will not appear in today's proposed permit but will be included in the final rule)
Addendum C—Notice of Termination (NOT) Form (an NOT will not appear in today's proposed permit but will be included in the final rule)
Addendum D—Large, Medium, and Designated Municipalities
Addendum E—Basic Format for Environmental Assessment
Addendum F—Section 313 Water Priority Chemicals
Addendum G—Region-Specific Permit Conditions

I. Coverage Under This Permit

A. Permit Area

The permit covers all areas of:

Region I—for the States of Maine, Massachusetts, and New Hampshire; for Indian lands located in Connecticut, Massachusetts, New Hampshire, Maine, Rhode Island, and Vermont; and for Federal facilities in Vermont.

Region II—for the Commonwealth of Puerto Rico; for Indian lands located in New York; and for Federal facilities in the U.S. Virgin Islands.

Region III—for the District of Columbia and for Federal facilities in Delaware.

Region IV—for the State of Florida; and for Indian lands located in Alabama, Florida, Mississippi, and North Carolina.

Region VI—for the States of Louisiana, New Mexico, Oklahoma, and Texas; and for Indian lands located in Louisiana, New Mexico (except Navajo lands and Ute Mountain Reservation lands), Oklahoma, and Texas.

Region VIII—for the State of South Dakota; for Indian lands located in Colorado, Montana, North Dakota, South Dakota, Utah (except Goshute Reservation and Navajo Reservation lands), and Wyoming; for the portion of the Pine Ridge Reservation located in Nebraska; for the Ute Mountain Reservation in Colorado and New Mexico; and for Federal facilities in Colorado.

Region IX—for the State of Arizona; for the Territories of American Samoa, Guam, Johnston Atoll, and Midway and Wake Island; for the Commonwealth of the Northern Mariana Islands; for the Republic of Palau (Trust Territory of the Pacific Islands); and for Indian lands located in California and Nevada; and for the Goshute Reservation in Utah and Nevada, the Navajo Reservation in Utah, New Mexico, and Arizona, the Duck Valley Reservation in Nevada and Idaho; and the Fort McDermitt Reservation in Oregon and Nevada.

Region X—for the State of Alaska, and Idaho; for Indian lands located in Alaska, Oregon (except for Fort McDermitt Reservation lands), Idaho (except Duck Valley Reservation lands), and Washington; and for Federal facilities in Washington.

B. Eligibility

1. Discharges covered. Except for storm water discharges identified under paragraph I.B.3., this permit may cover all new and existing point source discharges of storm water to waters of the United States that are associated with industrial activity identified under the eligibility sections contained in Part XI. (see Table 1).

TABLE 1

Storm water discharges from	Are eligible for coverage if listed in part
Timber Products Facilities	XI.A.1.
Paper and Allied Products Manufacturing Facilities	XI.B.1.
Chemical and Allied Products Manufacturing Facilities	XI.C.1.
Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities	XI.D.1.
Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	XI.E.1.
Primary Metals Facilities	XI.F.1.
Metal Mines (Ore Mining and Dressing)	XI.G.1.
Coal Mines and Coal Mine-Related Facilities	XI.H.1.
Oil or Gas Extraction Facilities	XI.I.1.
Mineral Mining and Processing Facilities	XI.J.1.
Hazardous Waste Treatment Storage or Disposal Facilities	XI.K.1.
Landfills and Land Application Sites	XI.L.1.
Automobile Salvage Yards	XI.M.1.
Scrap and Waste Material Processing and Recycling Facilities	XI.N.1.
Steam Electric Power Generating Facilities	XI.O.1.
Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities.	XI.P.1.
Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities	XI.Q.1.
Ship or Boat Building and Repair Yards	XI.R.1.
Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities.	XI.S.1.
Wastewater Treatment Works	XI.T.1.
Food and Kindred Products Facilities	XI.U.1.
Textile Mills, Apparel and other Fabric Product Manufacturing Facilities	XI.V.1.
Furniture and Fixture Manufacturing Facilities	XI.W.1.
Printing and Publishing Facilities	XI.X.1.
Rubber and Miscellaneous Plastic Product Manufacturing Facilities	XI.Y.1.
Leather Tanning and Finishing Facilities	XI.Z.1.
Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware	XI.AA.1.
Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery	XI.AB.1.
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods	XI.AC.1.

2. Construction. This permit may authorize storm water discharges associated with industrial activity that are mixed with storm water discharges associated with industrial activity from construction activities provided that the storm water discharge from the construction activity is authorized by and in compliance with the terms of a

different NPDES general permit or individual permit authorizing such discharges.

3. Limitations on coverage. The following storm water discharges associated with industrial activity are not authorized by this permit:

a. Storm water discharges associated with industrial activities that are not listed under the eligibility sections contained in Part XI. (see Table 1).

b. Storm water discharges subject to New Source Performance Standards except as provided in Part I.B.7. below.

c. Storm water discharges associated with industrial activity that are mixed with sources of non-storm water other than non-storm water discharges that are:

(1) In compliance with a different NPDES permit; or

(2) Identified by and in compliance with Part III.A. (Prohibition of Non-storm Water Discharges) of this permit.

d. Storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit (except storm water discharges subject to the NPDES General Permit for Storm Water Discharges Associated With Industrial Activity published September 9, 1992 [57 FR 41297], or September 25, 1992 [57 FR 44438]), are located at a facility where an NPDES permit has been terminated (other than at the request of the permittee) or denied, or that are issued a permit in accordance with Part VII.M (Requirements for Individual or Alternative General Permits) of this permit;

e. Storm water discharges associated with industrial activity that the Director [U.S. Environmental Protection Agency (EPA)] has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard;

4. Storm water not associated with industrial activity. Storm water discharges associated with industrial activity that are authorized by this permit may be combined with other sources of storm water that are not classified as associated with industrial activity pursuant to 40 CFR 122.26(b)(14).

5. Endangered species protection. In order to be eligible for coverage under this permit, the applicant must ensure compliance with the Endangered Species Act. A discharge of storm water associated with industrial activity may be covered under this permit only if either:

(i) The storm water discharge has no direct or indirect effect on a listed endangered or threatened species or its designated critical habitat, or

(ii) The applicant has obtained and is in compliance with an effective incidental take permit issued by either the U.S. Fish and Wildlife Service or National Marine Fisheries Service pursuant to Section 10(a) of the Endangered Species Act.

6. National Historic Preservation Act. In order to be eligible for coverage under this permit, the applicant must ensure compliance with the National Historic Preservation Act. A discharge of storm water associated with industrial activity may be covered under this permit only if either:

(i) The storm water discharge will not disturb a site that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior, or

(ii) The applicant has obtained and is in compliance with a written agreement between the applicant and the State Historic Preservation Officer (SHPO) that is signed by the SHPO and that outlines all measures to be undertaken by the applicant to mitigate or prevent adverse effects to the historic site.

7. Discharges subject to new source performance standards. Operators of facilities with storm water discharges subject to New Source Performance Standards [1] shall have documentation of a final Agency decision indicating that the Agency has determined that the storm water discharge has no direct or indirect impact. This documentation shall be obtained and retained on site prior to the submittal of the Notice of Intent. Operators of these facilities shall not be authorized under the terms and conditions of this permit until the submittal of a Notice of Intent to gain coverage under this permit. Where documentation of the Agency's decision has not been obtained for a facility subject to New Source Performance Standards, the operator must obtain such documentation prior to submitting an NOI. The permittee may use the format in Addendum E to submit information to EPA to initiate the process of the environmental review. The information shall be sent to the appropriate address listed in Part VI.B. of this permit. In order to maintain eligibility, the permittee must implement any mitigation required of the facility as a result of the NEPA review process. Failure to implement mitigation measures upon which the Agency's NEPA finding is based is grounds for termination of permit coverage.

C. Authorization

Dischargers of storm water associated with industrial activity must submit an NOI in accordance with the requirements of Part II of this permit, using an NOI form as found in Addendum C (or photocopy thereof), to be authorized to discharge under this general permit.[2] Unless notified by the Director to the contrary, owners or operators who submit such notification are authorized to discharge storm water associated with industrial activity under the terms and conditions of this permit 2 days after the date that the NOI is postmarked. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

II. Notice of Intent Requirements

A. Deadlines for Notification

1. Existing facility. Except as provided in paragraphs II.A.4. (New Operator), and II.A.5. (Late Notification), individuals who intend to obtain coverage for an existing storm water discharge associated with industrial activity under this general permit shall submit an NOI in accordance with the requirements of this part on or before [insert date 90 days after permit finalization];

2. New facility. Except as provided in paragraphs II.A.3. (Oil and Gas Operations), II.A.4. (New Operator), and II.A.5. (Late Notification), operators of facilities that begin industrial activity after [insert date 90 days after permit finalization] shall submit an NOI in accordance with the requirements of this part at least 2 days prior to the commencement of the industrial activity at the facility;

3. Oil and gas operations. Operators of oil and gas exploration, production, processing, or treatment operations or transmission facilities, that are not required to submit a permit application as of [insert date 90 days after permit finalization] in accordance with 40 CFR

[1] Storm water discharges subject to New Source Performance Standards (NSPS) and that may be covered under this permit include: runoff from material storage piles at cement manufacturing facilities [40 CFR Part 411 Subpart C (established February 23, 1977)]; contaminated runoff from phosphate fertilizer manufacturing facilities [40 CFR Part 418 Subpart A (established April 8, 1974)]; coal pile runoff at steam electric generating facilities [40 CFR Part 423 (established November 19, 1982)]; and runoff from asphalt emulsion facilities [40 CFR Part 443 Subpart A (established July 24, 1975)]. NSPS apply only to discharges from those facilities or installations that were constructed after the promulgation of NSPS. For example, storm water discharges from areas where the production of asphalt paving and roofing emulsions occurs are subject to NSPS only if the asphalt emulsion facility was constructed after July 24, 1975.

[2] A copy of the approved NOI form is not provided in today's proposed permit; however, it will be included in Addendum C of the final notice.

122.26(c)(1)(iii), but that after [insert date 90 days after permit finalization] have a discharge of a reportable quantity of oil or a hazardous substance for which notification is required pursuant to either 40 CFR 110.6, 40 CFR 117.21, or 40 CFR 302.6, must submit an NOI in accordance with the requirements of Part II.C. of this permit within 14 calendar days of the first knowledge of such release.

4. New operator. Where the operator of a facility with a storm water discharge associated with industrial activity that is covered by this permit changes, the new operator of the facility must submit an NOI in accordance with the requirements of this part at least 2 days prior to the change.

5. Late notification. An operator of a storm water discharge associated with industrial activity is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1., 2., 3., or 4. (above) of this permit. In such instances, EPA may bring appropriate enforcement actions.

B. Contents of Notice of Intent

The NOI shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit and shall include the following information:

1. Permit. An indication of which NPDES storm water general permit is being applied for;

2. Name. The operator's name, address, telephone number, and status as Federal, State, private, public, or other entity;

3. Location. The street address of the facility for which the notification is submitted. Where a street address for the site is not available, the location of the approximate center of the facility must be described in terms of the latitude and longitude to the nearest 15 seconds, or the quarter section, township and range (to the nearest quarter section);

4. Indian lands. An indication of whether the facility is located on Indian Lands;

5. Receiving water. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s) for the discharge through the municipal separate storm sewer;

6. Co-permittee. The storm water general permit number if such a number has been issued to a co-permittee;

7. Monitoring. The monitoring status of the facility;

8. SIC code. Up to four 4-digit Standard Industrial Classification (SIC) codes that best represent the principal products produced or services rendered, or for hazardous waste treatment, storage or disposal facilities, land/disposal facilities that receive or have received any industrial waste, steam electric power generating facilities, or treatment works treating domestic sewage, a narrative identification of those activities;

9. Other permits. The permit number(s) of additional NPDES permit(s) for any discharge(s) (including non-storm water discharges) from the site that are currently authorized by an NPDES permit;

10. Eligibility certification. The following certification shall be signed in accordance with Part VII.G.

I certify under penalty of law that I have read and understand the Part I.B. Eligibility requirements for coverage under the general NPDES Multi-sector storm water permit for which this Notice of Intent is being submitted, including those eligibility requirements relating to protection of; endangered or threatened species under the Endangered Species Act, and sites that are either listed or eligible for listing in the National Historic Register under the National Historic Preservation Act. To the best of my knowledge the discharges covered under this Notice are eligible for coverage. I further certify that I understand that continued authorization to discharge under this permit is contingent on maintaining eligibility as provided in Part I.B.;

11. Pollution prevention plan certification. For any facility that begins to discharge storm water associated with industrial activity after [insert date 270 days after permit finalization], a certification that a storm water pollution prevention plan has been prepared for the facility in accordance with Part IV. of this permit. (Do not include a copy of the plan with the NOI submission.)

C. Where to Submit

Facilities that discharge storm water associated with industrial activity must use an NOI form provided by the Director (or photocopy thereof). NOIs must be signed in accordance with Part VII.G. (Signatory Requirements) of this permit. NOIs are to be submitted to the Director of the NPDES program in care of the following address:

[Address to be provided in Final Notice.]

D. Additional Notification

Facilities that discharge storm water associated with industrial activity through large or medium municipal separate storm sewer systems (systems located in an incorporated city with a population of 100,000 or more, or in a county identified as having a large or medium system (see definition in Part X. of this permit and Addendum D of this notice)), or into a municipal separate storm sewer that has been designated by the permitting authority shall, in addition to filing copies of the NOI in accordance with paragraph II.C., submit signed copies of the NOI to the operator of the municipal separate storm sewer through which they discharge in accordance with the deadlines in Part II.A. (Deadlines for Notification) of this permit.

III. Special Conditions

A. Prohibition of Non-storm Water Discharges

1. Storm water discharges. Except as provided in paragraph III.A.2 (below), all discharges covered by this permit shall be composed entirely of storm water.

2. Non-storm water discharges. a. Except as provided in paragraph III.A.2.b (below), discharges of material other than storm water must be in compliance with an NPDES permit (other than this permit) issued for the discharge.

b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with Part IV. discharges from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown that does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Releases in Excess of Reportable Quantities

1. Hazardous substances or oil. The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302. Except as provided in paragraph III.B.2 (Multiple Anticipated Discharges) of this permit, where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40

CFR Part 117 or 40 CFR Part 302, occurs during a 24-hour period:

a. The discharger is required to notify the National Response Center (NRC) (800–424–8802; in the Washington, DC metropolitan area 202–426–2675) in accordance with the requirements of 40 CFR Part 117 and 40 CFR Part 302 as soon as he or she has knowledge of the discharge;

b. The storm water pollution prevention plan required under Part IV. (Storm Water Pollution Prevention Plans) of this permit must be modified within 14 calendar days of knowledge of the release to: Provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed by the permittee to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate; and

c. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: The release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with paragraph III.B.1.b. (above) of this permit to the appropriate EPA Regional Office at the address provided in Part VI.B. (Reporting: Where to Submit) of this permit.

2. Multiple anticipated discharges. Facilities that have more than one anticipated discharge per year containing the same hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 117 or 40 CFR Part 302, that occurs during a 24-hour period, where the discharge is caused by events occurring within the scope of the relevant operating system shall:

a. Submit notifications in accordance with Part III.B.1.b. (above) of this permit for the first such release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI); and

b. Shall provide in the storm water pollution prevention plan required under Part IV. (Storm Water Pollution Prevention Plan) a written description of the dates on which all such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the release. In addition, the plan must be reviewed to identify measures to prevent or minimize such releases and the plan must be modified where appropriate.

3. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill.

C. Co-located Industrial Activity

Co-located industrial activities located at facilities described in Part XI. of this permit are those activities that support the primary industrial activity of the facility. Storm water discharges from co-located industrial activities are authorized by this permit, provided that the industrial facility complies with the additive pollution prevention plan and monitoring requirements applicable to the co-located industrial activity. The operator of the facility shall determine which additional pollution prevention plan and monitoring requirements are applicable to the co-located industrial activity by examining the narrative descriptions of the sections in Part XI. of this permit.

IV. Storm Water Pollution Prevention Plans

A storm water pollution prevention plan shall be developed for each facility covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices and in accordance with the factors outlined in 40 CFR 125.3(d)(2) or (3) as appropriate. The plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance

1. Existing facilities. Except as provided in paragraphs 3., 4., and 5. (below), all existing facilities and new facilities that begin operation on or before [insert date 270 days after permit finalization] shall prepare and implement the plan by [insert date 270 days after permit finalization].

2. New facilities. Facilities that begin operation after [insert date 270 days after permit finalization] shall prepare and implement the plan prior to submitting the Notice of Intent.

3. Oil and gas facilities. Oil and gas exploration, production, processing or treatment facilities that are not required to submit a permit application on or before [insert date 90 days after permit finalization] in accordance with 40 CFR 122.26(c)(1)(iii), but after [insert date 270 days after permit finalization] have a discharge of a reportable quantity of oil or a hazardous substance for which notification is required pursuant to either 40 CFR 110.6 or 40 CFR 302.6, shall prepare and implement the plan on or before the date 60 calendar days after first knowledge of such release.

4. Facilities previously subject to the baseline general permit. Facilities previously subject to the NPDES General Permit for Storm Water Discharges Associated With Industrial Activity (57 FR 41297 or 57 FR 44438) shall continue to implement the storm water pollution prevention plan required by that permit. The plan shall be revised as necessary to address requirements under Part XI. of this permit no later than [insert date 270 days after permit finalization]. The revisions made to the plan shall be implemented on or before [insert date 270 days after permit finalization].

5. Measures that require construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later [insert date 3 years after permit finalization].

6. Extensions. Upon a showing of good cause, the Director may establish a later date in writing for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and Plan Review

1. Signature/location. The plan shall be signed in accordance with Part VII.G. (Signatory Requirements), and be retained onsite at the facility that generates the storm water discharge in accordance with Part VII.P.2. (Retention of Records) of this permit. For inactive facilities, the plan may be kept at the nearest office of the permittee.

2. Availability. The permittee shall make plans available upon request to the Director, or authorized representative, or in the case of a storm water discharge associated with industrial activity that discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. Required modifications. The Director, or authorized representative, may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit that are not being met by the plan, and identify

which provisions of the plan requires modifications in order to meet the minimum requirements of this part. Within 30 days of such notification from the Director, (or as otherwise provided by the Director), or authorized representative, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

C. Keeping Plans Current

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D. (Contents of the Plan) of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by EPA in the same manner as Part IV.B. (above).

D. Contents of the Plan

The contents of the pollution prevention plan shall comply with the requirements listed in the appropriate section of Part XI. (Specific Requirements for Industrial Activities). Table 2 lists the location of the plan requirements for the respective industrial activities. These requirements are cumulative. If a facility has co-located activities that are covered in more than one section of Part XI., that facility's pollution prevention plan must comply with the requirements listed in all applicable sections of this permit.

TABLE 2.—POLLUTION PREVENTION PLAN REQUIREMENTS

Storm water discharges from	Are subject to pollution prevention plan requirements listed in part
Timber Products Facilities	XI.A.3.
Paper and Allied Products Manufacturing Facilities	XI.B.3.
Chemical and Allied Products Manufacturing Facilities	XI.C.4.
Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities	XI.D.3.
Glass, Clay, Cement Concrete and Gypsum Product Manufacturing Facilities	XI.E.3.
Primary Metals Facilities	XI.F.3.
Metal Mines (Ore Mining and Dressing)	XI.G.3.
Coal Mines and Coal Mine-Related Facilities	XI.H.3.
Oil or Gas Extraction Facilities	XI.I.3.
Mineral Mining and Processing Facilities	XI.J.3.
Hazardous Waste Treatment Storage or Disposal Facilities	XI.K.3.
Landfills and Land Application Sites	XI.L.3.
Automobile Salvage Yards	XI.M.3.
Scrap and Waste Material Processing and Recycling Facilities	XI.N.3.
Steam Electric Power Generating Facilities	XI.O.3.
Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities.	XI.P.3.
Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities	XI.Q.3.
Ship or Boat Building and Repair Yards	XI.R.3.
Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities.	XI.S.3.
Wastewater Treatment Works	XI.T.3.
Food and Kindred Products Facilities	XI.U.3.
Textile Mills, Apparel and other Fabric Product Manufacturing Facilities	XI.V.3.
Furniture and Fixture Manufacturing Facilities	XI.W.3.
Printing and Publishing Facilities	XI.X.3.
Rubber and Miscellaneous Plastic Product Manufacturing Facilities	XI.Y.3.
Leather Tanning and Finishing Facilities	XI.Z.3.
Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware	XI.AA.3.
Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery	XI.AB.3.
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods	XI.AC.3.

E. Special Pollution Prevention Plan Requirements

In addition to the minimum standards listed in Part XI. of this permit (Special Requirements for Discharges Associated With Specific Industrial Activities), the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

1. Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more—a. In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

b. Permittees that discharge storm water associated with industrial activity through a municipal separate storm sewer system serving a population of 100,000 or more, or a municipal system designated by the Director shall make plans available to the municipal operator of the system upon request.

2. Additional requirements for storm water discharges associated with industrial activity from facilities subject to EPCRA section 313 requirements. In

addition to the requirements of Part XI. of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under EPCRA Section 313 for chemicals that are classified as "Section 313 water priority chemicals" in accordance with the definition in Part X. of this permit shall describe and ensure the implementation of practices that are necessary to provide for conformance with the following guidelines:

a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

(1) Curbing, culverting, gutters, sewers, or other forms of drainage control to prevent or minimize the potential for storm water runon to come into contact with significant sources of pollutants; or

(2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.

b. In addition to the minimum standards listed under Part IV.E.1.a. (above) of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations, and guidelines:

(1) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for section 313 water priority chemicals—(a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

(2) Material storage areas for section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids that are subject to runoff, leaching, or wind shall incorporate drainage or other control features that will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

(3) Truck and rail car loading and unloading areas for liquid section 313 water priority chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) Areas where section 313 water priority chemicals are transferred, processed, or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

(5) Discharges from areas covered by paragraphs (1), (2), (3), or (4)—(a) Drainage from areas covered by paragraphs (1), (2), (3), or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by (1), (2), (3), or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3), or (4)), from which runoff that may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

(7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures that could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered that may result in significant releases of Section 313 water priority chemicals to waters of the United States, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the United States shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training. Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are use or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation that are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

(10) Engineering certification. The storm water pollution prevention plan for a facility subject to EPCRA Section 313 requirements for chemicals that are classified as Section 313 water priority chemicals shall be reviewed and certified by a Registered Professional Engineer. The Registered Professional Engineer authorized to conduct the certification shall recertify the plan every 3 years thereafter or as soon as practicable after significant modifications are made to the facility. By means of these certifications, the Registered Professional Engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by the plan of their duty to prepare and fully implement such plan.

3. Additional requirements for salt storage. Storage piles of salt used for deicing or other commercial or industrial purposes and that generate a storm water discharge associated with industrial activity that is discharged to waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than [insert date 3 years after permit finalization]. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States.

4. Consistency with other plans. Storm water pollution prevention plans may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

V. Numeric Effluent Limitations

A. Discharges Associated With Specific Industrial Activity

Numeric effluent limitations for storm water discharges associated with a specific industrial activity are described in Part XI. of this permit.

B. Coal Pile Runoff

Any discharge composed of coal pile runoff shall not exceed a maximum concentration for any time of 50 mg/L total suspended solids. Coal pile runoff shall not be diluted with storm water or other flows in order to meet this limitation. The pH of such discharges shall be within the range of 6.0 to 9.0. Runoff from coal piles located at steam electric generating facilities shall be in compliance with these limits upon submittal of the Notice of Intent (NOI). Runoff from coal piles at all other types of facilities shall comply with these limitations as expeditiously as practicable, but in no case later than [insert date 3 years after permit finalization]. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event shall not be subject to the 50 mg/L limitation for total suspended solids.

VI. Monitoring and Reporting Requirements

A. Monitoring Requirements

1. Limitations on Monitoring Requirements—a. Except as required by paragraph b., only those facilities with discharges or activities identified in Part VI.C. and Part XI. are required to conduct sampling of their storm water discharges associated with industrial activity. Monitoring requirements under parts VI.C. and XI. are additive. Facilities with discharges or activities described in more than one monitoring section are subject to all applicable monitoring requirements.

b. The Director can provide written notice to any facility otherwise exempt from the sampling requirements of Parts VI.C. and XI. that it shall conduct discharge sampling for a specific monitoring frequency for specific parameters.

B. Reporting: Where to Submit

1. Location. Signed copies of discharge monitoring reports required under Parts XI. and VI.C., individual permit applications, and all other reports required herein, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office:

a. CT, MA, ME, NH, RI, VT, EPA, Region I, Water Management Division, (WCP–2109), Storm Water Staff, John F. Kennedy Federal Building, Room 2209, Boston, MA 02203.

b. NJ, NY, PR, VI, EPA, Region II, Water Management Division, (2WM–WPC), Storm Water Staff, 26 Federal Plaza, New York, NY 10278.

c. DE, DC, MD, PA, VA, WV, EPA, Region III, Water Management Division, (3WM55), Storm Water Staff, 841 Chestnut Building, Philadelphia, PA 19107.

d. FL and Indian Lands in AL, FL, MS, and NC, EPA, Region IV, Water Management Division, Permits Section (WPEB–7), 345 Courtland Street, NE, Atlanta, GA 30365.

e. AR, LA, NM (except see Region IX for Navajo lands, and see Region VIII for Ute Mountain Reservation lands), OK, TX, EPA, Region VI, Water Management Division, (6W–EA), Storm Water Staff, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, 12th Floor, Suite 1200, Dallas, TX 75202.

f. CO, MT, ND, SD, WY, UT (except see Region IX for Goshute Reservation and Navajo Reservation lands) and Portions of Pine Ridge Reservation in Nebraska, EPA, Region VIII, NPDES Branch (8WM–C), 999 18th Street, Suite 500, Denver, CO 80202–2466.

Note—For Montana Indian Lands, please use the following address: EPA, Region VIII, Montana Operations Office, Federal Office Building, Drawer 10096, 301 South Park, Helena, MT 59620–0026.

g. AZ, CA, HI, NV, Guam, American Samoa, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in NV and ID, EPA, Region

IX, Water Management Division, (W–5–1), Storm Water Staff, 75 Hawthorne Street, San Francisco, CA 94105.

h. AK, ID (except see Region IX for Duck Valley Reservation lands), OR (except see Region IX for Fort McDermitt Reservation lands), WA, EPA, Region X, Water Division, (WD–134), Storm Water Staff, 1200 Sixth Avenue, Seattle, WA 98101.

2. Additional notification. In addition to filing copies of discharge monitoring reports in accordance with Part VI.B. (Reporting: Where to Submit), facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) or a municipal system designated by the Director must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in Part XI. Facilities not required to report monitoring data under Part XI. and facilities that are not otherwise required to monitor their discharges, need not comply with this provision.

C. Special Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities and activities identified in Parts VI.C.1. (below) must monitor those storm water discharges identified below at least annually (1 time per year). Permittees with facilities identified in Parts VI.C.1. (below) must report in accordance with Part VI.B. (Reporting: Where to Submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) samples; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event samples and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge samples.

1. Coal pile runoff. In addition to any monitoring required by Part XI., facilities with coal piles exposed to storm water shall monitor such storm water for: pH and TSS (mg/L).

2. Sample type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected), a minimum of one grab sample may be taken. For all other discharges, data shall be reported for a grab sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

3. Sampling waiver. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.). Dischargers are precluded from exercising this waiver more than once during a 2-year period.

4. Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, and the permittee reasonably believes substantially identical effluents are discharged, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. Permittees required to submit monitoring information under Part VIII. of this permit shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report. Permittees who received approval from the Environmental Protection Agency of a substantially identical outfall petition prior to submitting their application may submit a copy of the petition and the letter from the Permits Division of the NPDES Program Branch in lieu of the above information.

5. Alternative certification. A discharger is not subject to the monitoring requirements of Part VI. of this permit provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that coal piles that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.B. of this permit.

6. When to submit. Permittees subject to monitoring requirements under Part VI.A. shall submit monitoring results annually no later than the 28th day of [insert month following permit finalization].

VII. Standard Permit Conditions

A. Duty to Comply

1. *Permittee's duty to comply.* The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Clear Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for violations of permit conditions a. Criminal—(1) Negligent violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

(2) Knowing violations. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

(3) Knowing endangerment. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both.

(4) False statement. The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309(c)(4) of the Clean Water Act).

b. Civil penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed $25,000 per day for each violation.

c. Administrative penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

(1) Class I penalty. Not to exceed $10,000 per violation nor shall the maximum amount exceed $25,000.

(2) Class II penalty. Not to exceed $10,000 per day for each day during which the violation continues nor shall the maximum amount exceed $125,000.

B. Continuation of the Expired General Permit

This permit expires on [insert date 5 years after permit finalization]. However, an expired general permit continues in force and effect until a new general permit is issued. Permittees that choose or are required, to obtain an individual permit must submit an application (Forms 1 and 2F and any other applicable forms) 180 days prior to expiration of this permit. Permittees that are eligible and choose to be covered by a new general permit must submit an NOI by the date specified in that permit.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information

The permittee shall furnish to the Director, within a time specified by the Director, any information that the Director may request to determine compliance with this permit. The permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.

G. Signatory Requirements

All Notices of Intent, Notices of Termination, storm water pollution prevention plans, reports, certifications or information either submitted to the Director (and/or the operator of a large or medium municipal separate storm sewer system), or that this permit requires be maintained by the permittee, shall be signed.

1. Signature. All reports required by the permit and other information requested by the Director shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality: State, Federal, or other public facility: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. Authorized representative. All reports required by the permit and other information requested by the Director shall be signed by a person described in Section VII.G.1. above or be signed by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Director.

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

c. Changes to authorization. If an authorization under paragraph VII.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new NOI satisfying the requirements of paragraph II.B. (Contents of NOI) must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing documents under this section shall make the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

H. Penalties for Falsification of Reports

Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both.

I. Penalties for Falsification of Monitoring Systems

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

K. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

M. Requiring an Individual Permit or an Alternative General Permit

1. Director designation. The Director may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Director to take action under this paragraph. The Director may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Individual permit applications shall be submitted to the address of the appropriate Regional Office shown in Part VI.B. (Reporting: Where to Submit) of this permit. The Director may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application as required by the Director, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

2. Individual permit application. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2F) with reasons supporting the request to the Director. Individual permit applications shall be submitted to the address of the appropriate Regional Office shown in Part VI.B. of this permit. The request may be granted by the issuance of any individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

3. Individual/alternative general permit issuance. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is authorized for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Director.

N. State/Environmental Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

O. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

P. Monitoring and Records

1. Representative samples/measurements. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Retention of records—a. The permittee shall retain the pollution prevention plan developed in accordance with Parts IV. and XI. of this permit until at least 1 year after coverage under this permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the NOI to be covered by this permit, until at least 1 year after coverage under this permit terminates. This period may be explicitly modified by specific provisions of this permit or extended by request of the Director at any time.

b. For discharges subject to monitoring requirements pursuant to Parts VI. and XI. of this permit, in addition to the requirements of paragraph VII.P.2.a. (above), permittees are required to retain for a 6-year period from the date of sample collection or for the term of this permit, whichever is greater, records of all monitoring

information collected during the term of this permit. Permittees must submit such monitoring results to the Director upon request.

3. Records contents. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The initials or name(s) of the individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The time(s) analyses were initiated;

e. The initials or name(s) of the individual(s) who performed the analyses;

f. References and written procedures, when available, for the analytical techniques or methods used; and

g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

4. Approved monitoring methods. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

Q. Inspection and Entry

The permittee shall allow the Director or an authorized representative of EPA, the State environmental agency, or, in the case of a facility that discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to: Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

R. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

S. Bypass of Treatment Facility

1. Notice—a. Anticipated bypass. If a permittee subject to the numeric effluent limitation of Parts V. and XI. of this permit knows in advance of the need for a bypass, he or she shall submit prior notice, if possible, at least 10 days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass.

b. Unanticipated bypass. The permittee subject to the numeric effluent limitation of Parts V. and XI. of this permit shall submit notice of an unanticipated bypass. Any information regarding the unanticipated bypass shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee became aware of the circumstances. The written submission shall contain a description of the bypass and its cause; the period of the bypass; including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

2. Prohibition of bypass—a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass. Unless:

(*1*) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(*2*) There were no feasible alternatives to the bypass, such as the use of auxiliary facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee should, in the exercise of reasonable engineering judgement, have installed adequate backup equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(*3*) The permittee submitted notices of the bypass.

b. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed in Part VII.S.2.a.

T. Upset Conditions

1. Affirmative defense. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based numeric effluent limitations in Parts V. and XI. of this permit if the requirements of paragraph 2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, if final administrative action subject to judicial review.

2. Required defense. A permittee who wishes to establish the affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

a. An upset occurred and that the permittee can identify the specific cause(s) of the upset:

b. The permitted facility was at the time being properly operated; and

c. The permittee provided oral notice of the upset to EPA within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee became aware of the circumstances. The written submission shall contain a description of the upset and its cause; the period of the upset; including exact dates and times, and if the upset has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the upset.

3. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

VIII. Reopener Clause

A. Potential or Realized Impacts on Water Quality

If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part VII.M. (Requiring an Individual Permit or Alternative General Permit) of this permit or the permit may be modified to include different limitations and/or requirements.

B. Applicable Regulations

Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64, and 124.5.

IX. Termination of Coverage

A. Notice of Termination

Where all storm water discharges associated with industrial activity that are authorized by this permit are eliminated, or where the operator of storm water discharges associated with industrial activity at a facility changes, the operator of the facility may submit a Notice of Termination that is signed in accordance with Part VII.G. (Signatory Requirements) of this permit. The Notice of Termination shall include the following information:

1. Facility information. Name, mailing address, and location of the facility for which the notification is submitted.

Where a street address for the site is not available, the location of the approximate center of the site must be described in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter section;

2. Operator information. The name, address, and telephone number of the operator addressed by the Notice of Termination;

3. Permit number. The NPDES permit number for the storm water discharge associated with industrial activity identified by the Notice of Termination;

4. Reason for termination. An indication of whether the storm water discharges associated with industrial activity have been eliminated or the operator of the discharges has changed; and

5. Certification. The following certification signed in accordance with Part VII.G. (Signatory Requirements) of this permit:

> I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have been eliminated or that I am no longer the operator of the industrial activity. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by an NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

B. Addresses

All Notices of Termination are to be sent, using the form provided by the Director (or a photocopy thereof),[3] to the Director of the NPDES program in care of the address that will be provided in the final permit notice.

X. Definitions

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Coal pile runoff means the rainfall runoff from or through any coal storage pile.

Co-located industrial activity means when an industrial facility has industrial activities being conducted onsite that meet the description of industrial activities in another section of the permit, that industrial facility shall comply with all applicable monitoring and pollution prevention plan requirements of the other section in addition to its applicable requirements.

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

Director means the Regional Administrator or an authorized representative.

Flow-weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Large and medium municipal separate storm sewer system means all municipal separate storm sewers that are either:

(i) Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

(ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

(iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

NOT means notice of termination (see Part IX.A. of this permit.)

Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Section 313 water priority chemical means a chemical or chemical categories that are: (1) are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); (2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and (3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria. See Addendum A of this permit.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include

[3] A copy of the approved NOT form is provided in Addendum D of this notice.

discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in paragraphs (i) through (x) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR Part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraphs (i) to (xi) of this definition) include those facilities designated under 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards that are exempted under category (xi) of this definition);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of noncoal mining operations that have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but that have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221–25), 43, 44, 45 and 5171 that have vehicle maintenance shops. equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or that are otherwise identified under paragraphs (i) to (vii) or (ix) to (xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR Part 503;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area that are not part of a larger common plan of development or sale;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221–25, (and that are not otherwise included within categories (i) to (x)).[4]

Time-weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with the numeric effluent limitations of Parts V. and XI. of this permit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste pile means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

Waters of the United States means:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands";

(c) All other waters such as interstate lakes, rivers, streams (including

[4] On June 4, 1992, the United States Court of Appeals for the Ninth Circuit remanded the exclusion for manufacturing facilities in category (xi) that do not have materials or activities exposed to storm water to the EPA for further rulemaking. (Nos. 90–70671 and 91–70200.)

intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) That are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

XI. Specific Requirements for Industrial Activities

A. Storm Water Discharges Associated With Industrial Activity From Timber Products Facilities

1. Discharges covered under this section. The requirements listed under this section shall apply to storm water discharges from the following activities: establishments [generally classified under Standard Industrial Classification (SIC) Major Group 24] that are engaged in cutting timber and pulpwood, merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in wood preserving or in manufacturing finished articles made entirely of wood or related materials, except for wood kitchen cabinet manufacturers classified under SIC Code 2434.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions—a. Prohibition of non-storm water discharges—(1) Discharges of boiler blowdown and water treatment wastewaters, noncontact and contact cooling waters, wash down waters from treatment equipment, and storm water that has come in contact with areas where spraying of chemical formulations designed to provide surface protection, to waters of the United States, or through municipal separate storm sewer systems are not authorized by this permit. The operators of such discharges must obtain coverage under a separate NPDES discharge permit.

(2) The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with paragraph XI.A.3.a.(3)(g)(i) (Measures and Controls for Non-storm Water Discharges): discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray down waters and no chemicals are applied to the wood during storage.

3. Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant Sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.A.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; material handling areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; processing areas; treatment chemical storage areas; treated wood and residue storage areas; wet decking areas; dry decking areas; untreated wood and residue storage areas; and treatment equipment storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials— An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance

of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. The inventory of exposed materials shall include, but shall not be limited to the significant materials stored exposed to storm water and material management practices employed that were listed for the facility in the approved group application. Where information is available, facilities that have used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or wood preserving activities onsite in the past should identify in the inventory the following: Areas where contaminated soils, treatment equipment, and stored materials still remain and management practices employed to minimize the contact of these materials with storm water runoff.

(c) Spills and leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk identification and summary of potential pollutant sources—A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any specific pollutant or pollutant parameter (e.g., total suspended solids, biochemical oxygen demand, chemical oxygen demand, oil and grease, arsenic, copper, chromium, pentachlorophenol, other specific metals, toxicity, etc.) of concern shall be identified.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water best management practices (BMPs) and controls appropriate for the facility, and the implementation of such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following areas of the site: Log, lumber and other wood product storage areas; residue storage areas, loading and unloading areas; material handling areas; chemical storage areas; and equipment/vehicle maintenance, storage and repair areas. Facilities that surface protect and/or preserve wood products should address specific BMPs for wood surface protection and preserving activities. The pollution prevention plan should address the following minimum components, including a schedule for implementing such controls:

(a) Good housekeeping—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. Good housekeeping measures in storage areas, loading and unloading areas, and material handling areas should be designed to: (1) limit the discharge of wood debris; (2) minimize the leachate generated from decaying wood materials; and (3) minimize the generation of dust.

(b) Preventive maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. Periodic removal of debris from ditches, swales, diversions, containment basins, sediment ponds and infiltration measures should be performed to limit discharges of solids and to maintain the effectiveness of the controls.

(c) Spill prevention and response procedures—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel. Response schedules should be developed to limit tracking of spilled materials to other areas of the site. Leaks or spills of wood surface protection or preservation chemicals shall be cleaned up immediately in accordance with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.A.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. Operators of facilities are required to conduct quarterly visual inspections of BMPs. The inspections shall include:

(1) An assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures;

(2) Visual inspection of sediment and erosion BMPs to determine if soil erosion has occurred; and

(3) Visual inspections of storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

Material handling, and unloading and loading areas should be inspected daily whenever industrial activities occur in those areas. Good housekeeping measures and/or spill response measures should be implemented as appropriate to minimize contact of significant materials with storm water discharges

Inspections at processing areas, transport areas, and treated wood storage areas of facilities performing wood surface protection and preservation activities should be performed monthly to assess the usefulness of practices in minimizing drippage of treatment chemicals on unprotected soils and in areas that will come in contact with storm water discharges.

A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm

water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm water discharges—(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.A.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2.b. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [Insert date of permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: The procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. When developing the plan, the following areas of the site should be considered: Loading and unloading areas, access roads, material handling areas, storage areas, and any other areas where heavy equipment and vehicle use is prevalent. The following erosion and sediment controls shall be considered to minimize the discharge of sediments from the site: Stabilization measures such as seeding, mulching, contouring, porous pavement, paving and sodding and structural measures such as sediment traps and silt fences.

(i) Management of runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.A.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: Vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall include the following:

(a) Areas contributing to a storm water discharge associated with industrial activity such as loading/unloading areas, material handling areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.A.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.A.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.A.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not

identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric effluent limitations—There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and reporting requirements—a. Analytical monitoring requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with facilities engaged in wood preservation and/or surface protection must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Facilities engaged in wood preservation and/or surface protection are required to monitor their storm water discharges for the pollutants of concern listed in Table A–1 below. Facilities currently using chlorophenolic formulations for wood preservation or surface protection, or that have used chlorophenolic formulations in the past, shall monitor storm water discharges for the parameters of concern listed in Table A–2 in addition to the parameters listed in Table A–1. Facilities that use copper-chromium-arsenic formulations for the preservation of wood shall monitor discharges for the presence of the pollutants of concern listed in Table A–3 in addition to the pollutants in Table A–1. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Tables A–1, A–2, and A–3 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE A–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration(mg/L)
Chemical Oxygen Demand	65.0
Total Suspended Solids	100.0
Biochemical Oxygen Demand	9.0

TABLE A–2.—ADDITIONAL MONITORING FOR FACILITIES PERFORMING WOOD PRESERVATION WITH CHLOROPHENOLIC FORMULATIONS

Pollutant of concern	Monitoring cut-off concentration
Pentachlorophenol	Detection Limit.

TABLE A–3.—ADDITIONAL MONITORING FOR FACILITIES PERFORMING WOOD PRESERVATION WITH CHROMIUM-COPPER-ARSENIC FORMULATIONS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Recoverable Arsenic	0.000018
Total Recoverable Copper	0.009

(1) Monitoring periods. Facilities engaged in wood preservation and/or surface protection shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling waiver—(a) Adverse conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph 5.a.(1) (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low concentration waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Tables A–1, A–2, or A–3 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

(4) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be

provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with facilities engaged in wood preservation and/or surface protection shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet to this permit.

(1) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), facilities engaged in wood preservation and/or surface protection with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly visual examination of storm water quality. All timber products facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

B. Storm Water Discharges Associated With Industrial Activity From Paper and Allied Products Manufacturing Facilities

1. Discharges covered under this section. The requirements listed under this section shall apply to storm water discharges from the following activities: Facilities engaged in the manufacture of pulps from wood and other cellulose fibers and from rags; the manufacture of paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes and envelopes; and establishments primarily engaged in manufacturing bags of plastic film and sheet. These facilities are commonly identified by Standard Industrial Classification (SIC) Major Group 26.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located

industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions—a. Prohibition of Non-storm Water Discharges. There are no additional requirements beyond those in Part III.A. of this permit.

3. Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

1. Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(*a*) *Drainage*—(*i*) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.B.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes and wastewaters, locations used for the treatment, filtration, or storage of water supplies, liquid storage tanks, processing areas, and storage areas.

(*ii*) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(*b*) *Inventory of exposed materials*—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. The inventory of exposed materials shall include, but shall not be limited to the significant materials stored exposed to storm water and material management practices employed that were listed for the facility in the approved group application.

(*c*) *Spills and leaks*—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(*d*) *Sampling data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(*e*) *Risk identification and summary of potential pollutant sources*—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices, and wastewater treatment activities to include sludge drying, storage, application or disposal activities. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(*3*) *Measures and controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(*a*) *Good housekeeping*—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. The plan shall describe procedures performed to minimize contact of materials with storm water runoff. Examples include cleaning of lots and roofs that collect debris; routine cleaning of wastewater treatment, and other waste disposal (such as sludge handling) locations.

(*b*) *Preventive maintenance*—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(*c*) *Spill prevention and response procedures*—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage

requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup should be available to personnel.

(*d*) *Inspections*—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(*e*) *Employee training*—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(*f*) *Recordkeeping and internal reporting procedures*—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(*g*) *Non-storm water discharges*—(*i*) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph (iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [Insert date of permit issuance], 270 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(*h*) *Sediment and erosion control*—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(*i*) *Management of runoff*—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see Part XI.B.3.a.(2) of this permit (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices; reuse of collected storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices, and wet detention/retention devices; screens or fences used to protect dust and particulate collection activities from wind or to minimize the effects of wind on material loading and storage, and processing activities to eliminate or reduce wind-blown or airborne pollutants; secondary containment of storage areas such as berms and dikes; diversionary structures to direct storm water away from areas of potential contamination; and tarpaulins, roofs, or other coverings of outdoor storage or industrial activities.

(*4*) *Comprehensive site compliance evaluation.* Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity such as material storage, handling, and disposal activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.B.3.a.(2) of this permit (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with Part XI.B.3.a.(3) of this permit (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the

implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph (4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric effluent limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and reporting requirements—a. Monitoring requirements—(1) Quarterly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent) shall be provided in the plan.

C. Storm Water Discharges Associated With Industrial Activity From Chemical and Allied Products Manufacturing Facilities

1. Discharges covered under this section. The requirements listed under this section shall apply to storm water discharges associated with industrial activity represented by Standard Industrial Classification (SIC) codes from the following activities:

a. SIC 281 (industrial inorganic chemicals). This industry group includes establishments primarily engaged in manufacturing basic industrial inorganic chemicals.

b. SIC 282 (plastic materials and synthetic resins, synthetic rubber, cellulosic and other manmade fibers, except glass). This group includes chemical establishments primarily engaged in manufacturing plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other manmade fibers.

c. SIC 284 (soap, detergents, and cleaning preparations; perfumes, cosmetics, and other toilet preparations). This industry group includes establishments primarily engaged in manufacturing soap and other detergents and in producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations.

d. SIC 285 (paints, varnishes, lacquers, enamels, and allied products). Establishments primarily engaged in manufacturing paints (in paste and ready-mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers, and sealers; paint and varnish removers; paint brush cleaners; and allied paint products.

e. SIC 286 (industrial organic chemicals). Establishments primarily engaged in manufacturing industrial organic chemicals.

f. SIC 287 (agricultural chemicals). This group includes establishments primarily engaged in manufacturing nitrogenous and phosphatic basic fertilizers, mixed fertilizer, pesticides, and other agricultural chemicals.

g. SIC 289 (miscellaneous chemical products). Establishments primarily engaged in manufacturing industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials, purchased or produced in the same establishment; establishments primarily engaged in manufacturing explosives; establishments primarily engaged in manufacturing printing ink, including gravure ink, screen process ink, and lithographic; establishments primarily engaged in manufacturing miscellaneous chemical preparations, not elsewhere classified, such as fatty acids, essentials oils, gelatin (except vegetable), sizes, bluing, laundry sours, writing and stamp pad ink, industrial

compounds, such as boiler and heat insulating compounds, metal, oil, and water treatment compounds, waterproofing compounds, and chemical supplies for foundries.

h. Facilities represented by SIC 3952 (lead pencils, crayons, and artist's materials), but only those primarily engaged in the manufacturing of ink and paints, including china painting enamels, india ink, drawing ink, platinum paints for burnt wood or leather work, paints for china painting, artists' paints and artists' water colors.

i. Co-located industrial activities. When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Discharges not covered by this section—a. Storm water discharges from drug manufacturing facilities and other establishments classified as SIC Code 283.

3. Special conditions—a. Prohibition of non-storm water discharges. This permit does not authorize the discharge of:

(1) Inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans.

(2) Washwaters from material handling and processing areas. This includes areas where containers, equipment, and industrial machinery are exposed to storm water.

(3) Washwaters from areas where raw materials, intermediate products, final products, waste materials, by-products, and significant materials from past industrial activity are exposed to storm water.

(4) Washwaters from drum, tank, or container rinsing and cleaning.

b. Rain gauge installation and precipitation log—(1) Permittees that are required to sample under Part XI.C.6.a. shall install a rain gauge no later than [insert date 270 days after permit issuance] and shall maintain the rain gauge for the extent of the four sampling periods.

(2) After installation of the rain gauge, the permittee shall keep daily records of precipitation indicating the date and amount of precipitation. These records shall be signed by qualified facility personnel and shall be retained onsite in accordance with Part VI.D. (Retention of Records) of this permit.

c. Pollution prevention plan certification. By [insert date 270 days following permit finalization], the permittee shall submit to the appropriate Regional Office, as indicated in Part VI.B., a statement of certification stating that a pollution prevention plan has been developed and implemented in accordance with all conditions and requirements established in this permit. This certification shall include the language and meet the signatory requirements of Part VII.G. of this permit.

4. Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team. The team will be responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources of pollutants to storm water discharges and sources of discharges of pollutants during dry weather. Each plan shall identify all activities and materials that may be pollutant sources. Each plan shall include, at a minimum:

(a) Drainage and site plan—A site map shall be developed for the facility. This map shall include, at a minimum: the location of all structures (manufacturing buildings, garages, etc.), impervious areas, the location of each storm water outfall and/or connection to municipal storm sewer; an outline of the portions of the drainage area of each outfall within the facility boundaries and a prediction of the direction of flow in each area; each existing structural control measure to reduce pollutants in storm water runoff; surface water bodies; locations where materials are exposed to precipitation; and locations where major spills or leaks identified under Part XI.C.4.a.(2)(c) (below) of this permit have occurred. The map shall also indicate the locations of the following outdoor activities: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; the location of transfer of substances in bulk; and machinery.

(b) Inventory of exposed materials and management practices—An inventory of the types of materials handled at the site that may be exposed to precipitation shall be collected. Such inventory shall include: a narrative description of materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and leaks—A list of significant spills and leaks of material that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance after the date of 3 years prior to the effective date of this permit. The list shall be updated as appropriate to include any significant spills and leaks during the term of the permit.

(d) Sampling data—A summary of existing storm water sampling data describing pollutants discharged from the facility, including a summary of sampling data collected during the term of this permit. In addition, the report of monitoring data that is submitted to EPA pursuant to Part VI. of this permit shall be maintained with the pollution prevention plan.

(e) Risk identification and summary of potential pollutant sources— (i) A narrative description of the potential pollutant sources from the following:

loading, unloading, and transfer of chemicals; outdoor storage of salt, pallets, coal, drums, containers, fuels, or other materials; outdoor manufacturing or processing activities; significant dust or particulate generating processes; fueling stations; vehicle and equipment maintenance and/or cleaning areas; locations used for the treatment, storage or disposal (on or off site) of wastes and wastewaters; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; the location of transfer of substances in bulk; and machinery.

(ii) The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., chemical oxygen demand, etc.) of concern shall be identified.

(iii) Factors to consider include: quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills. In addition, flows with a significant potential for causing erosion shall be identified.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a reasonable schedule for implementing such controls:

(a) Nonstructural controls—(i) Good housekeeping—Good housekeeping requires that areas that may contribute pollutants to storm water discharges are maintained in a clean, orderly manner. At a minimum, the permittee shall:

- Schedule regular pickup and disposal of garbage and waste materials. This schedule shall be included in the plan. Individuals responsible for waste management and disposal shall be informed of the procedures established under the plan.
- Routinely inspect for leaks and the condition of drums, tanks and containers. Ensure that spill cleanup procedures are understood by employees.
- Keep an up-to-date inventory of all materials present at the facility. While preparing the inventory, all containers should be clearly labeled. Hazardous containers that requires special handling, storage, use and disposal shall be clearly marked.
- Maintain clean ground surfaces.

(ii) Preventive maintenance—A preventive maintenance program shall be developed and shall involve timely inspection and maintenance of storm water management devices (e.g., oil/water separators, catch basins, dikes, storm sewer, basins, pipes). Also, preventive maintenance includes inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures, and ensuring appropriate maintenance of such equipment and systems.

(iii) Spill prevention and response procedures—Spill prevention and response procedures shall be developed. Areas where potential spills (that can contribute pollutants to storm water discharges) can occur and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup (e.g., absorbent materials) should be available to personnel.

(iv) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, material management practices and procedures for equipment and container cleaning and washing. A pollution prevention plan shall identify periodic dates for such training of at least once per year.

(v) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(vi) Facility security—Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(b) Structural practices—The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see Part XI.C.4.a.(2) (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate structural measures. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained.

(i) Practices for material handling and storage areas—Permittees shall ensure the implementation of practices that conform with the following:

- In areas where liquid or powdered materials are stored, facilities shall provide either diking, curbing, or berms.
- In all other outside storage areas including storage of used containers, machinery, scrap and construction materials, and pallets, facilities shall prevent or minimize storm water runon to the storage area by using curbing, culverting, gutters, sewers or other forms of drainage control.
- In all storage areas, roofs, covers or other forms of appropriate protection shall be used to prevent storage areas from exposure to storm water and wind. For the purpose of this paragraph, tanks would be considered to be appropriate protection.
- In areas where liquid or powdered materials are transferred in bulk from truck or rail cars, permittees shall provide appropriate measures to minimize contact of material with precipitation. Hose connection points at storage containers shall be inside containment areas. Drip pans shall be used in areas that are not in a containment area, where spillage may occur (e.g., hose reels, connection points with rail cars or trucks). Material collected in drip pans shall not be discharged to waters of the United States.
- In areas of transfer of contained or packaged materials and loading/unloading areas, permittee shall provide appropriate protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks.

Drainage from areas covered by paragraph XI.C.4.a.(3)(b)(i) of this section should be restrained by valves or other positive means to prevent the discharge of a spill or leak. Containment units may be emptied by pumps or ejectors; however, these shall be manually activated.

Flapper-type drain valves shall not be used to drain containment areas. Valves

used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

If facility drainage is not engineered as above, the final discharge of all in-facility sewers shall be equipped with a diversion system that could, in the event of an uncontrolled spill of materials, return the spilled material to the facility.

(c) Management of runoff—Plan shall contain a description of storm water management practices used and/or to be used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. Appropriate measures may include: vegetative swales, ripraps, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, use of porous pavements, and wet detention/retention devices.

(d) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a potential for significant soil erosion. Plans shall describe permanent stabilization practices and shall ensure that disturbed portions of the site are stabilized. Stabilization practices may include: permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.

(e) Non-storm water discharges—(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph (iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [insert date 270 days after permit issuance] 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(4) Comprehensive site compliance evaluation. A member(s) of the pollution prevention team or a qualified professional designated by the team shall conduct site compliance evaluations.

(a) Evaluations shall be conducted at least four times each year—A wet weather evaluation (during a rainfall event) shall be conducted in the second (April to June) and third quarters (July to September) of the year. A dry weather evaluation (no precipitation) shall be conducted in the first (January to April) and fourth quarters (October to December).

(*b*) When a seasonal dry period is sustained for more than 3 months, a dry weather inspection will satisfy the wet weather comprehensive compliance evaluation inspection requirement.

(*c*) All areas exposed to precipitation at the facilities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented or whether additional control measures are needed. Structural storm water management measures (diking, berming, curbing, sediment and erosion control measures, stabilization controls, etc.) required under this section shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(*d*) Based on the results of the inspection, the description of potential pollutant sources (see Part XI.C.4.a.(2)) and pollution prevention measures and controls (see Part XI.C.4.a.(3)) identified in the plan shall be revised as appropriate within 2 weeks of such inspection. In addition, it shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(*e*) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, observations relating to the implementation of the plan, and actions taken in accordance with paragraph XI.C.4.a.(4)(d) (above) shall be made and retained as part of the plan for at least 1 year after coverage under this permit terminates. The report shall also identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

5. Numeric effluent limitations. In addition to the numeric effluent limitations described by Part V. of this permit, the following effluent limitations shall be met by existing and new discharges with:

a. Phosphate fertilizer manufacturing runoff. The provisions of this paragraph are applicable to storm water discharges from the Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10). The term contaminated storm water runoff shall mean precipitation runoff, that during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products or waste product (40 CFR 418.11(c)). The concentration of pollutants in storm water discharges shall not exceed the effluent limitations in Table C–1.

TABLE C–1.—NUMERIC EFFLUENT LIMITATIONS

Effluent characteristics	Effluent Limitations (mg/L)	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Total Phosphorus (as P)	105.0	35.0
Fluoride	75.0	25.0

6. Monitoring and reporting requirements—a. Analytical monitoring requirements—During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with chemical manufacturing facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 6.a.(3) (Sampling Waiver), 6.a.(4) (Representative Discharge), and 6.a.(5) (Alternative Certification). Chemical manufacturing facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table C–2 below. Facilities must report in accordance with 6.b. (Reporting). In addition to the parameters listed in Table C–2 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE C–2.—MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Total recoverable aluminum	0.75
Ammonia	0.093
Total recoverable copper	0.009
Total recoverable manganese	0.05
Total recoverable zinc	0.065
Total recoverable iron	0.3
Total kjeldahl nitrogen (TKN)	1.5
Nitrate plus nitrite nitrogen	0.68

(1) Monitoring periods. Chemical manufacturing facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver—(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low concentration waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table C–2 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

(4) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with chemical manufacturing facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), chemical manufacturing facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Compliance monitoring requirements. In addition to the monitoring required in paragraph b. (above), permittees with contaminated storm water runoff from phosphate fertilizer manufacturing facilities must monitor their contaminated storm water discharges for the presence of phosphorus and fluoride at least annually (one time per year) except as provided in Part XI.C.6.c.(2) (Representative Discharge). Facilities must report in accordance with Part XI.C.6.c.(3) (Reporting). In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

(2) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(3) Reporting. Permittees with phosphate fertilizer manufacturing facilities shall submit monitoring results obtained during the reporting period beginning [insert date of permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following [insert month after permit issuance date]. Signed copies of Discharge Monitoring Reports shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office indicated in Part VI.B. of this permit.

(4) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph (3) (above), permittees that discharge through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph (3) (above).

d. Monthly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable

(greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

D. Storm Water Discharges Associated With Industrial Activity From Asphalt Paving and Roofing Materials and Lubricant Manufacturers

1. Discharges covered under this section—a. Eligibility—(1) This permit covers all existing point source discharges of storm water associated with industrial activity to waters of the United States from facilities engaged in manufacturing asphalt paving and roofing materials, including those facilities commonly identified by Standard Industrial Classification (SIC) codes 2951 and 2952.

(2) This permit covers all existing point source discharges of storm water associated with industrial activity to waters of the United States from portable asphalt plant facilities.

(3) This permit covers all existing point source discharges of storm water associated with industrial activity to waters of the United States from facilities engaged in manufacturing lubricating oils and greases, including those facilities classified as SIC code 2992.

(4) When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

b. Limitations on coverage. The following storm water discharges associated with industrial activity are not authorized by this section of the permit:

(1) Storm water discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products and that are classified as SIC code 2911.

2. Special conditions—a. Prohibition of non-storm water discharges—(1) Discharges of material other than storm water, including vehicle wash water, must be in compliance with an NPDES permit (other than this permit) issued for the discharge.

3. Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under XI.D.3.a.(2)(c) (spills and leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas including areas where raw materials, finished products and drums are stored.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood

of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk identification and summary of potential pollutant sources—A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good housekeeping—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas.

(b) Preventive maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) *Spill Prevention and Response Procedures*—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) *Inspections*—In addition to or as part of the comprehensive site evaluation required under XI.D.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. Material storage and handling areas, liquid storage tanks, hoppers or silos, vehicle and equipment maintenance, cleaning, and fueling areas, material handling vehicles, equipment and processing areas shall be inspected at least once per month as part of the maintenance program. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) *Employee training*—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) *Recordkeeping and internal reporting procedures*—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) *Non-storm water discharges*—(*i*) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.D.3.a.(3)(g)(iii) (below).

(*ii*) Except for flows from fire fighting activities, sources of non-storm water listed in part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(*iii*) *Failure to certify*—Any facility that is unable to provide the certification required (testing for non-

storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(*h*) *Sediment and erosion control*—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(*i*) *Management of runoff*—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see paragraph XI.D.3.a.(2) of this section (Description of Potential Pollutant Sources)) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(*4*) *Comprehensive site compliance evaluation.* Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Evaluations should be conducted at least once at portable plant locations. Such evaluations shall provide:

(*a*) Areas contributing to a storm water discharge associated with industrial activity including; material storage and handling areas, liquid storage tanks, hoppers or silos, vehicle and equipment maintenance, cleaning, and fueling areas, material handling vehicles, equipment and processing areas, and areas where aggregate is stockpiled outdoors shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, (e.g., oil/water separators, detention ponds, sedimentation basins) sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as dust collection equipment and spill response equipment, shall be made.

(*b*) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with XI.D.3.a.(2) of this section (description of potential pollutant sources) and pollution prevention measures and controls identified in the plan in accordance with XI.D.3.a.(3) of this section (measures and controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(*c*) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph (4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(*d*) Where compliance evaluation schedules overlap with inspections required under XI.D.3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric effluent limitations. The following numeric effluent limitations are in addition to those in Part V. of this permit. Discharges from areas where production of asphalt paving and roofing emulsions occurs may not exceed a TSS concentration of 23.0 mg/L of runoff for any 1 day, nor shall the average of daily values for 30 executive days exceed a TSS concentration of 15.0 mg/L of runoff. Oil and grease concentrations in storm water discharges from these areas may not exceed 15.0 mg/L of runoff for any 1 day, nor should the average daily values for 30 consecutive days exceed an oil and grease concentration of 10.0 mg/L of runoff. The pH of these discharges must be within the range of 6.0 to 9.0.

5. Monitoring and reporting requirements—a. Monitoring requirements—(1) Quarterly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

b. Compliance monitoring requirements. Permittees with facilities that produce asphalt paving or roofing emulsions must monitor their storm water discharges associated with these activities for the presence of TSS, oil and grease, and for pH at least annually (one time per year) except as provided in paragraph 5.b.(2) (representative discharge). Facilities must report in accordance with 5.b.(1) (reporting). In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

(2) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(3) Reporting. Permittees with asphalt paving or roofing emulsion production facilities shall submit monitoring results obtained during the reporting period beginning [insert date of permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following [insert month after permit issuance date]. Signed copies of Discharge Monitoring Reports shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office indicated in Part VI.B. of this permit.

(4) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph (3) (above), permittees that discharge through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph (3) (above).

E. Storm Water Discharges Associated With Industrial Activity From Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities

1. Discharges covered under this section. The requirements listed under this section shall apply to storm water discharges from the following activities: Manufacturing flat, pressed, or blown glass or glass containers; manufacturing hydraulic cement; manufacturing clay products including tile and brick; manufacturing of pottery and porcelain electrical supplies; manufacturing concrete products; manufacturing gypsum products; nonclay refractories; and grinding or otherwise treating minerals and earths. This section generally includes the following types of manufacturing operations:

- Flat Glass, (SIC Code 3211);
- Glass Containers, (SIC Code 3221);
- Pressed and Blown Glass, Not Elsewhere Classified, (SIC Code 3229);
- Hydraulic Cement, (SIC Code 3241)
- Brick and Structural Clay Tile, (SIC Code 3251);
- Ceramic Wall and Floor Tile, (SIC Code 3253);
- Clay Refractories, (SIC Code 3255);
- Porcelain Electrical Supplies, (SIC Code 3264);
- Pottery Products, (SIC Code 3269);
- Concrete Block and Brick, (SIC Code 3271);
- Concrete Products, Except Block and Brick (SIC Code 3272);
- Ready-Mix Concrete, (SIC Code 3273);
- Gypsum Products, (SIC Code 3275);
- Minerals and Earths, Ground or Otherwise Treated, (SIC Code 3295);
- Nonclay Refractories, (SIC Code 3297).

Facilities engaged in the following activities are not eligible for coverage under this section:

- Lime manufacturing (SIC 3274)

- Cut stone and stone products (SIC 3281)
- Abrasive Products (SIC 3291)
- Asbestos Products (SIC 3292)
- Mineral Wool and Mineral Wool Insulation Products (SIC 3297).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2 Special conditions—a. Prohibition of non-storm water discharges. The discharge of pavement washwaters are only authorized where the discharge is in compliance with Part III.A.2.b.

3 Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.E.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation. fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas. Facilities shall also identify, on the site map, the location of any: Bag house or other dust control device; recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater and the areas that drain to the treatment device.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical, quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials— An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present, method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

*(C) Spills and leaks—*A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

*(d) Sampling data—*A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

*(e) Risk identification and summary of potential pollutant sources—*A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., Total Suspended Solids (TSS), etc.) of concern shall be identified.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

*Good housekeeping—*Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner.

(i) Facilities shall prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust other significant materials in storm water from paved portions of the site that are exposed to storm water Measures used to minimize the presence of these materials may include regular sweeping, or other equivalent measures. The plan shall indicate the frequency of sweeping

or other measures. The frequency shall be determined based upon consideration of the amount of industrial activity occurring in the area and frequency of precipitation, but shall not be less than once per week when cement, aggregate, kiln dust or fly ash are being handled or otherwise processed in the area.

(*ii*) Facilities shall prevent the exposure of fine granular solids such as cement, fly ash, and kiln dust to storm water. Where practicable, these materials shall be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Preventive maintenance—A preventive maintenance program shall involve routine inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(i) Facilities shall insure that any existing dust collection systems are properly operated and maintained.

(c) Spill prevention and response procedures—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility specified in the plan. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of once per month while the facility is in operation. The inspection shall take place while the facility is in operation and shall at a minimum include all of the following areas that are exposed to storm water at the site: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. Tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, truck wash out procedures, equipment wash down procedures and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm water discharges—(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.E.3.a.(3)(g)(iii) (below).

Facilities engaged in production of ready-mix concrete, concrete block, brick or other products shall include in the certification a description of measures that insure that process waste water that results from washing of trucks, mixers, transport buckets, forms or other equipment are discharged in accordance with NPDES requirements or are recycled. Facilities with wash water recycle ponds shall include an estimate of the amount of rainfall (in inches) required to cause the recycle pond to overflow in a 24-hour period.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm

water discharges associated with industrial activity [see paragraph XI.E.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity including but not limited to: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures such as recycle ponds, identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.E.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.E.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.E.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4 Numeric effluent limitations. In addition to the numeric effluent limitations described by Part V., the following limitations shall be met by existing and new dischargers.

a. Cement manufacturing facility, material storage runoff. Any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement shall not exceed a maximum concentration for any time of 50 mg/L Total Suspended Solids (TSS) nor the 6.0 to 9.0 range limitation for pH. Runoff from the storage piles shall not be diluted with other storm water runoff or flows to meet this limitation. Any untreated overflow from facilities designed, constructed and operated to treat the volume of material storage pile runoff that is associated with a 10-year, 24-hour rainfall event shall not be subject to the TSS or pH limitations. Dischargers subject to these numeric effluent limitations must be in compliance with these limits upon commencement of coverage and for the entire term of this permit.

5 Monitoring and reporting requirements—a. Analytical monitoring requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with brick and structural clay tile (SIC Code 3251), ceramic wall and floor tile (SIC Code 3253), clay refractories (SIC Code 3255), porcelain electrical supplies (SIC Code 3264), pottery products (SIC Code 3269), concrete block and brick (SIC Code 3271), concrete products except block and brick (SIC Code 3272), and ready-mix concrete (SIC Code 3273) facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Such facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table E–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table E–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE E–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Suspended Solids (TSS)	100
Total Recoverable Aluminum	0.75
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Zinc	0.065

(1) Monitoring periods. Brick and structural clay tile (SIC Code 3251), ceramic wall and floor tile (SIC Code 3253), clay refractories (SIC Code 3255), porcelain electrical supplies (SIC Code 3264), pottery products (SIC Code 3269), concrete block and brick (SIC Code 3271), concrete products except block and brick (SIC Code 3272), and ready-mix concrete (SIC Code 3273) shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be

taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge

(3) Sampling waiver—(a) Adverse conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph 5.a.(1) (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low concentration waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table E–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

(4) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with monitoring requirements under Part XI.E.5.a. shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet to this permit.

(1) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), facilities with monitoring requirements under Part XI.E.5.a. with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly visual examination of storm water quality. Glass, clay, cement, concrete, and gypsum manufacturing facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. Note that this requirement applies to all facilities and not just those subject to the analytical monitoring requirements under Part XI.E.5.a. of this permit. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of

color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Compliance monitoring requirements. Permittees with cement manufacturing facilities must monitor runoff from material storage for the presence of TSS and pH at least annually (one time per year) except as provided in paragraph 5.d.(2) below (representative discharge). Facilities must report in accordance with 5.d.(3) below (reporting). In addition to the parameters listed above, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

(1) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.

(2) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(3) Reporting. Permittees with material storage runoff from cement manufacturing facilities shall submit monitoring results obtained during the reporting period beginning [insert date of permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following [insert month after permit issuance date]. Signed copies of Discharge Monitoring Reports shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office indicated in Part VI.B. of this permit.

(4) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph (3) (above), permittees with discharges of material storage runoff from cement manufacturing facilities through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph 5.d.(3) (above).

F. Storm Water Discharges Associated With Industrial Activity From Primary Metals Facilities

1. Discharges covered under this section. The requirements listed under this section of today's permit shall apply to storm water discharges from the primary metal industry. This industry is commonly identified by Standard Industrial Classification (SIC) Major Group 33, that includes the following:

- SIC 331—Steel works, blast furnaces, and rolling and finishing mills
  - —3312—Steel works, blast furnaces, and rolling mills
  - —3315—Steel wiredrawing and steel nails and spikes
  - —3316—Cold-rolled steel sheet, strip, and bars
  - —3317—Steel pipes and tubes.
- SIC 332—Iron and steel foundries
  - —3321—Gray and ductile iron foundries
  - —3322—Malleable iron foundries
  - —3324—Steel investment foundries
  - —3325—Steel foundries, not elsewhere classified.
- SIC 333—Primary smelting and refining of nonferrous metals
  - —3331—Primary smelting and refining of copper
  - —3334—Primary production of aluminum
- SIC 334—Secondary smelting and refining of nonferrous metals
- SIC 335—Rolling, drawing, and extruding of nonferrous metals
  - —3351—Rolling, drawing, and extruding of copper
  - —3356—Rolling, drawing, and extruding of nonferrous metals, except copper and aluminum
  - —3357—Drawing and insulating of nonferrous wire.
- SIC 336—Nonferrous foundries (castings)
  - —3363—Aluminum die-castings
  - —3364—Nonferrous die-castings, except aluminum
  - —3365—Aluminum foundries
  - —3366—Copper foundries
  - —3369—Nonferrous foundries, except copper and aluminum.

• SIC 339—Miscellaneous primary metal products, not elsewhere classified
—3398—Metal heat treating
—3399—Primary metal products, not elsewhere classified.

Activities covered include, but are not limited to, storm water discharges associated with coking operations, sintering plants, blast furnaces, smelting operations, rolling mills, casting operations, heat treating, extruding, drawing, or forging of all types of ferrous and nonferrous metals, scrap, and ore.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special conditions—a. Prohibition of non-storm water discharges. There are no additional requirements beyond those described in Part III. of this permit.

3. Storm water pollution prevention plan requirements—a. Contents of plan. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.F.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes such as spent solvents or baths, sand, slag or dross, liquid storage tanks or drums, processing areas including pollution control equipment such as baghouses, and storage areas of raw materials such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. This list shall also include a description of areas of the facility where settling or deposition of particulate matter from processing operations such as furnace or oven emissions is likely.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials— An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. This description should also include areas with the potential for deposition of particulate matter from process air emissions or losses during material handling activities. The description shall be updated whenever there is a significant change in the type or quantity of exposed materials, or material management practices, that may affect the exposure of materials to storm water.

*(c) Spills and leaks—*A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

*(d) Sampling data—*A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

*(e) Risk identification and summary of potential pollutant sources—*A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes occurring indoors or out, with or without pollution control equipment in place to trap particulates; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., chemical oxygen demand, oil and grease, copper, lead, zinc, etc.) of concern shall be identified.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for

the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good housekeeping—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. The pollution prevention plan should consider implementation of the following measures where applicable.

(i) Establish a cleaning or maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, particularly areas of material loading/unloading, material storage and handling, and processing.

(ii) Pave areas of vehicle traffic or material storage where vegetative or other stabilization methods are not practical. Institute sweeping programs in these areas as well.

(iii) For unstabilized areas of the facility where sweeping is not practical, storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures, that effectively trap or remove sediment should be considered.

(b) Source controls—The permittee shall consider preventive measures to minimize the potential exposure of all significant materials (as described in Part XI.F.3.a.(3) of this section) to precipitation and storm water runoff. The permittee should consider in a narrative description the implementation of the following measures to reduce the exposure of all materials to storm water:

(i) Relocating all materials, including raw materials, intermediate products, material handling equipment, obsolete equipment, and wastes currently stored outside to inside locations.

(ii) Establishment of a schedule for removal of wastes and obsolete equipment to minimize the volume of these materials stored onsite that may be exposed to storm water.

(iii) Substitution of less hazardous materials, or materials less likely to contaminate storm water, or substitution of recyclable materials for nonrecyclables wherever possible.

(iv) Constructing permanent or semipermanent covers, or other similar forms of protection over stockpiled materials, material handling and processing equipment. Options include roofs, tarps, and covers. This may also include the use of containment bins or covered dumpsters for raw materials, waste materials and nonrecyclable waste materials.

(v) Dikes, berms, curbs, trenches, or other equivalent measures to divert runon from material storage, processing, or waste disposal areas.

(c) Preventive maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(i) A schedule for inspection and maintenance of all particulate emissions control equipment should be established to ensure proper operation. Inspections should be conducted as described in Section XI.F.3.a.(3)(e) below. Detection of any leaks or defects that could lead to excessive emissions shall be repaired as soon as practicable.

(ii) Structural Best Management Practices (BMPs) will be visually inspected for signs of washout, excessive sedimentation, deterioration, damage, or overflowing, and shall be repaired or maintained as soon as practicable.

(d) Spill prevention and response procedures—Areas where potential spills that can contribute pollutants to storm water discharges may occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(e) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals, but no less frequently than once per month. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. Inspections shall be conducted on a monthly basis and address, at a minimum, the following areas where applicable:

(i) Air pollution control equipment such as baghouses, electrostatic precipitators, scrubbers, and cyclones, should be inspected on a routine basis for any signs of disrepair such as leaks, corrosion, or improper operation that could limit their efficiency and lead to excessive emissions. The permittee should consider monitoring air flow at inlets and outlets, or equivalent measures, to check for leaks or blockage in ducts. Visual inspections shall be made for corrosion, leaks, or signs of particulate deposition or visible emissions that could indicate leaks.

(ii) All process or material handling equipment such as conveyors, cranes, and vehicles should be inspected for leaks, drips, etc. or for the potential losses of materials.

(iii) Material storage areas such as piles, bins or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks or drums, should be examined for signs of material losses due to wind or storm water runoff.

(f) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(g) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(h) Non-storm water discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not

be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.F.3.a.(3)(h)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [Insert 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: The procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(i) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. The plan shall also contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see paragraph XI.F.3.a.(2) of this section (Description of Potential Pollutant Sources) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(j) Management of runoff—Facilities shall consider implementation of the following storm water management practices to address pollutants of concern:

(i) Vegetative buffer strips, filter fabric fence, sediment filtering boom, or other equivalent measures, that effectively trap or remove sediment prior to discharge through an inlet or catch basin.

(ii) Media filtration such as catch basin filters and sand filters.

(iii) Oil/water separators or the equivalent.

(iv) Structural BMPs such as settling basins, sediment traps, retention or detention ponds, recycling ponds or other equivalent measures.

(4) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity such as material storage and handling, loading and unloading, process activities, and plant yards shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, other structural pollution prevention measures identified in the plan, as well as process related pollution control equipment shall be observed or tested to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.F.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.F.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.F.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(i) Where significant settling or deposition from process emissions are observed during proper operation of existing equipment, the permittee shall consider ways to reduce these emissions including but not limited to: Upgrading or replacing existing equipment; collecting runoff from areas of deposition for treatment or recycling; or changes in materials or processes to reduce the generation of particulate matter.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(e), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric effluent limitations. There are no additional effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and reporting requirements—a. Analytical monitoring requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years

after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with primary metals facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Primary metals facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table F–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table F–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE F–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Nitrate + Nitrite Nitrogen	0.68
Total Kjeldahl Nitrogen (TKN)	1.5
Total Recoverable Aluminum	0.75
Total Recoverable Copper .	0.009
Total Recoverable Manganese	0.05
Total Recoverable Iron	0.3
Ammonia	0.0925
Total Recoverable Zinc	0.065
Pyrene	0.0000028

(1) Monitoring periods. Primary metals facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling waiver—(a) Adverse conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low concentration waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table F–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

(4) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with primary metals facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional

Office listed in Part VI.G. of the fact sheet.

(1) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), primary metals facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

G. Storm Water Discharges Associated With Industrial Activity From Metal Mining (Ore Mining and Dressing) Facilities

1. Discharges covered under this section—a. Eligibility. The requirements listed under this section shall apply to storm water discharges from active and inactive metal mining and ore dressing facilities that come under Standard Industrial Classification (SIC) Major Group 10 if the storm water has come into contact with, or is contaminated by, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation. SIC Major Group 10 includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores) and also includes all ore dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. For the purposes of this part of the permit, the term "metal mining" includes all ore mining and/or dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. All storm water discharges from inactive metal mining facilities and the storm water discharges from the following areas of active, and temporarily inactive, metal mining facilities are the only discharges covered by this section of the permit: topsoil piles; offsite haul/access roads if off active area; onsite haul roads if not constructed of waste rock or if spent ore and mine water is not used for dust control; runoff from tailings dams/dikes when not constructed of waste rock/tailings and no process fluids are present; concentration building, if no contact with material piles; mill site, if no contact with material piles; chemical storage area; docking facility, if no excessive contact with waste product; explosive storage; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially/inadequately reclaimed areas or areas not released from reclamation bonds.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

Limitations on coverage. The following storm water discharges associated with industrial activity are not authorized by this permit:

(1) Discharges from active metal mining facilities that are subject to the effluent limitation guidelines for the Ore Mining and Dressing Point Source Point Source Category (40 CFR part 440). Coverage under this permit does not

include adit drainage or contaminated springs or seeps at active facilities, temporarily inactive facilities, or inactive facilities. Also see Limitations on Coverage, Part I.B.3.

(2) Storm water discharges associated with an industrial activity that the Director (EPA) has determined to be, or may reasonably be expected to be, contributing to a violation of a water quality standard.

(3) Storm water discharges associated with industrial activity from inactive mining operations occurring on Federal lands where an operator cannot be identified.

2. Special definitions. The following definitions are only for this section of today's permit and are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii):

"Active metal mining facility" is a place where work or other related activity to the extraction, removal, or recovery of metal ore is being conducted. With respect to surface mines, an "active metal mining facility" does not include any area of land on or in which grading has been completed to return the earth to a desired contour and reclamation work has begun.

"Inactive metal mining and dressing facility" means a site where metal mining and/or milling activities occurred in the past but is not an active metal mining facility, as defined in this permit. The term means a site where reclamation subject to applicable State or Federal reclamation requirements has begun but has not been completed and/or the reclamation bond has not been released. The term also includes a site where the mining and/or milling activities occurred prior to the establishment of applicable State and/or Federal reclamation requirements or where there has been no mining or milling activities in the 10 years prior to the effective date of this permit. This definition also includes storm water discharges associated with industrial activity from inactive mine sites occurring on non-Federal lands where an operator cannot be identified.

"Temporarily inactive metal mining facility" means a site where metal mining and/or milling activities occurred in the past, but are not being actively undertaken and the criteria for being considered an inactive metal mining facility are not met.

3. Storm water pollution prevention plan requirements—a. Contents of plan for active and temporarily inactive metal mining facilities. The plan shall include, at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of mining activities. The plan shall provide a narrative description of the mining and associated activities taking place at the site that affect or may affect storm water runoff intended to be covered by this permit. The narrative description shall report the total acreage within the mine site, an estimate of the number of acres of disturbed land and an estimate of the total amount of land proposed to be disturbed throughout the life of the mine. A general description of the location of the mining site relative to major transportation routes and communities shall also be provided.

(3) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants (including sediment) to storm water discharges or that may result in the discharge of pollutants during dry weather. Each plan shall identify all activities and significant materials that may potentially be significant storm water pollutant sources from the active mining activity (see Part XI.G.1.). Each plan shall include, at a minimum:

a. Drainage—(i) A site topographic map shall be included in the plan that indicates, at a minimum: Mining/milling site boundaries and access and haul roads; the location of each storm water outfall and an outline of the portions of the drainage area that are within the facility boundaries; equipment storage, fueling and maintenance areas; materials handling areas; storage areas for chemicals and explosives; areas used for storage of overburden, materials, soils or wastes; location of mine drainage (where water leaves mine) or any other process water; tailings piles/ponds, both proposed and existing; heap leach pads; points of discharge from the property for mine drainage or any other process water; springs, streams, wetlands and other surface waters; and boundary of area that contributes runoff to outfalls that are subject to effluent limitations guidelines.

(ii) For each area of the mine/mill site that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants (e.g., heavy metals) that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the mineralogy of the ore and waste rock (e.g., acid forming), toxicity and quantity of chemical(s) used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials— For each storm water outfall that may be covered under this permit (see Part XI.G.1.), an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. The inventory of exposed materials shall include, but shall not be limited to the significant materials stored exposed to storm water and material management practices employed that were listed for the facility in the approved group application.

A summary of any existing ore or waste rock/overburden characterization data, including results of testing for acid rock generation potential. If the ore or waste rock/overburden characterization data is updated due to a change in the ore type being mined, the storm water pollution prevention plan shall be updated with the new data.

*(c) Spills and leaks—*A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list

shall be updated as appropriate during the term of the permit.

(d) Sampling data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk identification and summary of potential pollutant sources—A narrative description of the potential pollutant sources from the following activities associated with metal mining: Loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., heavy metals, etc.) of concern shall be identified.

(4) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good housekeeping—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. (For suggested measures for vehicle maintenance operations, see good housekeeping measures specified in Part XI.P. for transportation facilities.)

(b) Preventive maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. Particular attention shall be given to erosion control and sediment control systems and devices.

(c) Spill prevention and response procedures—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—The plan shall identify qualified personnel that shall inspect designated equipment and mine areas at least on a monthly basis for active sites. The monthly inspections can be done by any time during the month and do not have to be done immediately following a precipitation event. For temporarily inactive sites, the inspections should be quarterly; however, inspections are not required when adverse weather conditions (e.g., snow) make the site inaccessible. All material handling areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion control systems and sediment control devices shall also be inspected to determine if they are working properly. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the facility is encouraged.

(e) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, and material management practices. The pollution prevention plan shall specify how often training shall take place, but in all cases training must be held at least semiannually.

(f) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

Non-storm water discharges—(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges, such as seeps or adit discharges or discharges subject to effluent limitation guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water of any kind. The certification shall include the identification of potential significant sources of non-storm water or water subject to effluent limitation guidelines at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.G.3.a.(4)(g)(iii) (below).

Alternatively, the plan may include a certification that any non-storm water discharge that mixes with storm water is subject to a separate NPDES permit that applies applicable effluent limitations prior to the mixing of non-storm water and storm water. In such cases, the certification shall identify the non-storm water discharge(s), the applicable NPDES permit(s), the effluent limitations placed on the non-storm water discharge by the NPDES permit(s), and the point(s) at which the limitations are applied.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after

[Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant erosion of soil and/or other materials, and identify measures to be used to limit erosion and/or remove sediment from storm water runoff. The measures to consider include diversion of flow away from areas susceptible to erosion, stabilization methods to prevent or minimize erosion, and structural methods for controlling sediment. These can include the following:

Diversion practices include the following: Interceptor dikes and swales; diversion dikes curbs and berms; pipe slope drains; subsurface drains; and drainage/storm water conveyance systems (channels or gutters; open top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector; and culverts).

Stabilization practices include the following: Temporary or permanent seeding; vegetative buffer strips; protection of trees; topsoiling; soil conditioning; contouring; mulching; geotextiles (matting; netting; or blankets); riprap; gabions; and retaining walls.

Structural practices include the use of the following: Check dams; rock outlet protection; level spreaders; gradient terraces; straw bale barriers; silt fences; gravel or stone filter berms; brush barriers; sediment traps; grass swales; pipe slope drains; earth dikes; and other controls such as entrance stabilization, waterway crossings or wind breaks.

(i) Management of runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.G.3.a.(3) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices, or impoundments.

(j) Capping—In some cases, the elimination of a pollution source through capping contaminant sources may be the most effective control measure for discharges from inactive ore mining and dressing facilities. If capping of a contaminant source is necessary, the plan must identify which source is being capped and materials and procedures used to cap the contaminant source.

(k) Treatment—If treatment of a storm water discharge is necessary, the plan must describe how storm water will be treated prior to discharging to waters of the United States. Storm water treatments include the following: chemical/physical treatment; oil/water separators; and artificial wetlands.

(5) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.G.3.a.(3) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.G.3.a.(4) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.G.3.a.(5)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under XI.G.3.a.(4)(d), the compliance evaluation may be conducted in place of one such inspection.

b. Contents of plan for inactive metal mining facilities. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals that are responsible for the development, implementation, maintenance, and revision of the storm water pollution prevention plan. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the storm water pollution prevention plan at the inactive facility.

(2) Description of Mining Activities. The plan shall provide a narrative description of the mining and associated activities that took place at the site. The narrative description shall report the approximate dates of operation, the total acreage within the mine and/or processing site, an estimate of the number of acres of disturbed area, and the current activities (e.g., reclamation) that are taking place at the facility. A general description of the location of the mining site relative to major

transportation routes and communities shall also be provided.

(3) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants (including sediment) to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant storm water pollutant sources from the inactive mining site. Each plan shall include, at a minimum:

(a) Site Map—A generalized site map or maps that indicate any of the following that may be applicable: mining/milling site boundaries and access and haul roads; the location of each storm water outfall and an outline of the portions of the drainage area that are within the facility boundaries; areas used for storage of overburden, materials, soils, tailings, or wastes; areas used for outdoor manufacturing, storage, or disposal of materials; any remaining equipment storage, fueling, and maintenance areas; tailings piles/ponds; mine drainage or any other process water discharge points; an estimate of the direction(s) of flow; existing structural controls to reduce pollutants in storm water runoff; and springs, streams, wetlands, and other surface waters.

(b) Inventory of exposed materials—The plan shall include for each outfall an inventory and narrative description of any significant materials that may still be at the site. This description of sources should agree with sources identified on the map.

(c) Sampling data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(d) Risk identification and summary of potential pollutant sources—For each potential pollutant source at the site the pollutants of concern (e.g., heavy metals) shall be identified and an assessment made of the potential of these pollutant sources to contribute pollutants to storm water discharges.

(4) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Storm water diversion—Describe how and where storm water will be diverted away from potential pollutant sources to prevent storm water contamination. Storm water diversions include the following: interceptor dikes and swales; diversion dikes curbs and berms; pipe slope drains; subsurface drains; and drainage/storm water conveyance systems (channels or gutters; open top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector; and culverts).

(b) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant erosion of soil and/or other materials, and identify measures to be used to limit erosion and/or remove sediment from storm water runoff. The measures to consider include diversion of flow away from areas susceptible to erosion, stabilization methods to prevent or minimize erosion, and structural methods for controlling sediment. These can include the following:

Stabilization practices include the following: Temporary or permanent seeding; vegetative buffer strips; protection of trees; topsoiling; soil conditioning; contouring; mulching; geotextiles (matting; netting; or blankets); riprap; gabions; and retaining walls.

Structural practices include the use of the following: check dams; rock outlet protection; level spreaders; gradient terraces; straw bale barriers; silt fences; gravel or stone filter berms; brush barriers; sediment traps; grass swales; pipe slope drains; earth dikes; and other controls such as entrance stabilization, waterway crossings or wind breaks.

(c) Management of runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.G.3.b.(3) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls, snow management activities, infiltration devices, and wet detention/retention devices, or impoundments.

(d) Capping—In some cases, the elimination of a pollution source through capping contaminant sources may be the most effective control measure for discharges from inactive ore mining and dressing facilities. If capping of a contaminant source is necessary, the plan must identify which source is being capped and materials and procedures used to cap the contaminant source.

(e) Treatment—If treatment of a storm water discharge is necessary, the plan must describe how storm water will be treated prior to discharging to waters of the United States. Storm water treatments include the following: chemical/physical treatment; oil/water separators; and artificial wetlands.

(f) Recordkeeping and internal reporting procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(5) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph XI.G.3.b.(5)(d) (below), in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.G.3.b.(3) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.G.3.b.(4) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.G.3.b.(5)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in 3 years.

4. Numeric effluent limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and reporting requirements—a. Analytical monitoring requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], metal mining and dressing facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Active ore mining and dressing facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table G–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table G–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE G–1.—MONITORING REQUIREMENTS FOR ACTIVE FACILITIES

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Chemical Oxygen Demand (COD)	65
Total Suspended Solids (TSS)	100
Total Kjeldahl Nitrogen (TKN)	1.5
Nitrate plus Nitrite Nitrogen	0.68
Total Phosphorus	0.33
Ammonia	0.093
Total Recoverable Antimony	0.088
Total Recoverable Arsenic	0.000018
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
Total Recoverable Manganese	0.05
Total Recoverable Zinc	0.065

(1) Monitoring periods. Active ore mining and dressing facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling waiver—(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph 5.a.(1) (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low concentration waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table G–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which sampling was waived.

(4) Representative discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an

estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with active ore mining and dressing facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet to this permit.

(1) Additional notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), active ore mining and dressing facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Visual examination of storm water quality. Active and temporarily inactive mining facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event. Active mining facilities must examine storm water quality at least once in each month. The examination for temporarily inactive mining facilities must be made at least once a year (the same frequency as the Comprehensive Site Compliance Evaluation). Visual examination of Storm Water Quality at inactive mining facilities is not required.

(1) Examinations shall be made of grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

H. Storm Water Discharges Associated With Industrial Activity From Coal Mines and Coal Mining-Related Facilities

1. Discharges covered under this section. The requirements listed under this section shall apply to storm water discharges from coal mining-related areas if they are not subject to effluent limitations guidelines under 40 CFR Part 434. Coal mines are commonly identified by Standard Identical Classification (SIC) Major Group 12. Storm water discharges from the following portions of coal mines may be eligible for this permit:

- Haul Roads—Nonpublic roads on which coal or coal refuse is conveyed.
- Access Roads—Nonpublic roads providing light vehicular traffic within the facility property and to public roadways.
- Railroad Spurs, Sidings, and Internal Haulage Lines—Rail lines used for hauling coal within the facility

property and to offsite commercial railroad lines or loading areas.

• Conveyor Belts, Chutes, and Aerial Tramway Haulage Areas—Areas under and around coal or refuse conveyor areas, including transfer stations.

• Equipment Storage and Maintenance Yards.

• Coal Handling Buildings and Structures.

• Inactive Coal Mines and Related Areas—Abandoned and other inactive mines, refuse disposal sites and other mining-related areas.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special conditions—a. Prohibition of non-storm water discharges. Excluded from coverage under this permit are point source discharges of pollutant seeps or underground drainage from inactive coal mines and refuse disposal areas that do not occur as storm water discharges in response to precipitation events.

3. Storm water pollution prevention plan requirements. Most of the active coal mining-related areas described in paragraph XI.H.1. above, are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation Act (SMCRA). OSM has granted authority to most coal states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of erosion, siltation and other pollutants resulting from storm water runoff, including road dust resulting from erosion, shall be minimum requirements of the pollution prevention plan and shall be included in the contents of the plan directly, or by reference.

a. Contents of plan. The plan shall include at a minimum, the following items:

(1) Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of potential pollutant sources. Each plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials that may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—(i) A site map, such as a drainage map required for SMCRA permit applications, that indicate drainage areas and storm water outfalls. These shall include but not be limited to the following:

• Drainage direction and discharge points from all applicable mining-related areas described in Section XI.H.1.a. (discharges covered under this section) above, including culvert and sump discharges from roads and rail beds and also from equipment and maintenance areas subject to storm runoff of fuel, lubricants and other potentially harmful liquids.

• Location of each existing erosion and sedimentation control structure or other control measures for reducing pollutants in storm water runoff.

• Receiving streams or other surface water bodies.

• Locations exposed to precipitation that contain acidic spoil, refuse or unreclaimed disturbed areas.

• Locations where major spills or leaks of toxic or hazardous pollutants have occurred.

• Locations where liquid storage tanks containing potential pollutants, such as caustics, hydraulic fluids and lubricants, are exposed to precipitation.

• Locations where fueling stations, vehicle and equipment maintenance areas are exposed to precipitation.

(ii) For each area of the facility that generates storm water discharges associated with the mining-related activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with the activity. Factors to consider include the toxicity of the pollutant; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of exposed materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and leaks—A list of significant spills and leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling data—A summary of any existing discharge sampling data describing pollutants in storm water discharges from the portions of the facility covered by this permit, including a summary of any sampling data collected during the term of this permit.

(e) Risk identification and summary of potential pollutant sources—A narrative description of the potential pollutant sources from the following activities: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or

other liquid storage; pressure lines containing slurry, hydraulic fluid or other potential harmful liquids; and loading or temporary storage of acidic refuse or spoil. Specific potential pollutants shall be identified, where known.

(3) Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls.

(a) Good housekeeping—Good housekeeping requires the maintenance of areas that may contribute pollutants to storm water discharges in a clean, orderly manner. These would be practices that would minimize the generation of pollutants at the source or before it would be necessary to employ sediment ponds or other control measures at the discharge outlets. Where applicable, such measures would include the following:

- Sweepers and covered storage to minimize dust generation and storm runoff
- Conservation of vegetation where possible to minimize erosion
- Watering of haul roads to minimize dust generation
- Collection, removal, and proper disposal of waste oils and other fluids resulting from vehicle and equipment maintenance.

(b) Preventive maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. Where applicable, such measures would include the following:

- Removal and proper disposal of settled solids in catch basins to allow sufficient retention capacity
- Periodic replacement of siltation control measures subject to deterioration such as straw bales
- Inspections of storage tanks and pressure lines for fuels, lubricants, hydraulic fluid or slurry to prevent leaks due to deterioration or faulty connections.

(c) Spill prevention and response procedures—Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.H.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated areas of the facility at appropriate intervals specified in the plan. The following shall be included in the plan:

- *Active mining-related areas and those inactive areas under SMCRA bond authority*—The plan shall require quarterly inspections by the facility personnel for areas of the facility covered by pollution prevention plan requirements. This inspection interval corresponds with the quarterly inspections for the entire facility required to be provided by SMCRA authority inspectors for all mining-related areas under SMCRA authority, including sediment and erosion control measures. Inspections by the facility representative may be done at the same time as the mandatory inspections performed by SMCRA inspectors. At least one inspection shall be performed during a storm period of at least 0.1 inch rainfall where the effectiveness of the sediment and erosion control measures can be observed. During that inspection, a narrative evaluation of the control measures under storm conditions shall be made as well as visual impacts on the receiving stream. Records of inspections of the SMCRA authority facility representative shall be maintained.
- *Inactive mining-related areas not under SMCRA bond*—The plan shall require annual inspections by the facility representative except in situations referred to in paragraph XI.H.3.a.(4)(d) below.
- *Inspection records*—The plan shall require that inspection records of the facility representative and those of the SMCRA authority inspector shall be maintained. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections.

(e) Employee training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and internal reporting procedures—A description of incidents (such as spills or other discharges) along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm water discharges—(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges such as drainage from underground portions of inactive mines or floor drains from maintenance or coal handling buildings. The certification shall include the identification of potential significant sources of non-storm water discharges at the site, a description of the results of any test and/or evaluation, a description of the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit.

(ii) Except for flows from fire fighting activities, authorized sources of non-storm water listed in Part III.A.2. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Any facility that is unable to provide the certification required (testing or other evaluation for non-storm water discharges) must notify the Director by [270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform

adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water to the storm discharge lines; and why adequate tests for such storm discharge lines were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and erosion control—The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion and reduce sediment concentrations in storm water discharges. As indicated in paragraph XI.H.3.a.(3) above, SMCRA requirements regarding sediment and erosion control measures are minimum requirements of the pollution prevention plan for mining-related areas subject to SMCRA authority. The following sediment and erosion control measures should be included in the plan where reasonable and appropriate for all areas subject to storm water runoff:

- *Stabilization measures*—Interim and permanent stabilization measures to minimize erosion and lessen amount of structural sediment control measures needed, including: Mature vegetation preservation; temporary seeding; permanent seeding and planting; temporary mulching, matting, and netting; sod stabilization; vegetative buffer strips; temporary chemical mulch, soil binders, and soil palliatives; nonacidic roadsurfacing material; and protective trees.
- *Structural measures*—Structural measures to lessen erosion and reduce sediment discharges, including: Silt fences; earth dikes; straw dikes; gradient terraces; drainage swales; sediment traps; pipe slope drains; porous rock check dams; sedimentation ponds; riprap channel protection; capping of contaminated sources; and physical/chemical treatment of storm water.

(i) Management of flow—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (other than those as sediment and erosion control measures listed above) used to manage storm water runoff in a manner that reduces pollutants in storm water runoff from the site. The plan shall provide that the measures, which the permittee determines to be reasonable and appropriate, shall be implemented and maintained. Appropriate measures may include: discharge diversions; drainage/storm water conveyances; runoff dispersion; sediment control and collection; vegetation/soil stabilization; capping of contaminated sources; and treatment.

(4) Comprehensive site compliance evaluation. Qualified personnel shall conduct site compliance evaluations at intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with coal mining-related areas shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. These areas include haul and access roads; railroad spurs, sidings, and internal haulage lines; conveyor belts, chutes and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures, as indicated in paragraphs XI.H.3.a.(3)(h) and XI.H.3.a.(3)(i) above and where identified in the plan, shall be observed to ensure that they are operating correctly. A visual inspection of any equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan, in accordance with paragraph XI.H.3.a.(2) of this section, and pollution prevention measures and controls identified in the plan, in accordance with paragraph XI.H.3.a.(3) of this section, shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner. For inactive mines, such revisions may be extended to a maximum of 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.H.3.a.(4)(b) above shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection. Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in 3 years.

4. Numeric effluent limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and reporting requirements—a. Monitoring requirements—(1) Quarterly visual examination of storm water quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm

event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

I. Storm Water Discharges Associated With Industrial Activity From Oil and Gas Extraction Facilities

1. Discharges Covered Under This Section—a. Eligibility. This permit covers all existing point source discharges of storm water associated with industrial activity to waters of the United States from oil and gas facilities listed under Standard Industrial Classification (SIC) Major Group 13 which are required to be permitted under 40 CFR 122.26. Those industries in SIC Major Group 13 include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply and repair industries.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

There are no additional requirements beyond those listed in Part III. of this permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IX.I.3.a.(1)(c) (Spills and Leaks) of this permit have occurred, location of the area where the RQ release occurred; and the locations of the following activities where such activities are exposed to precipitation: Fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas, chemical mixing areas, construction and drilling areas. The site map will indicate all areas subject to the effluent guidelines requirement of "No Discharge" in accordance with 40 CFR 435.32 and the existing structural controls to achieve compliance with the "No Discharge" requirement.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to

consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. The permittee should consider the cause of RQ releases, the materials used to contain and remediate releases, and any other aspect of releases or clean-up which could potentially contribute pollutants to a storm water discharge. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; chemical, cement, mud or gel mixing activities; outdoor manufacturing or processing activities; drilling or mining activities; significant dust or particulate generating processes; and onsite waste disposal practices, equipment cleaning and rehabilitation activities. List any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

In its description of potential pollutant sources, a facility must include information about the RQ release which triggered the permit application requirements. Such information must include: the nature of the release(e.g., spill of oil from a drum storage area); the amount of oil or hazardous substance released; amount of substance recovered; date of the release; cause of the release (e.g., poor handling techniques as well as lack of containment in area); area affected by release, including land and waters; procedure to cleanup release; actions or procedures implemented to prevent or better respond to a release; and remaining potential contamination of storm water from release. The analysis shall take into account human health risks, the control of drinking water intakes, and the designated uses of the receiving stream.

(3) Measures and Controls. Each facility covered by this permit shall develop and implement storm water management controls appropriate for the facility. The controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such measures:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. The preventative maintenance program shall also include the inspection of all on site and off site mixing tanks and equipment, and all vehicles which carry supplies and chemicals to oil field activities.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Materials shall be stored indoors where possible, and drainage systems designed to discharge downstream from drinking water intakes. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.I.3.a.(4) of this section, qualified facility or plant personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. All equipment and areas addressed in the pollution prevention plan shall be inspected at a minimum of 6-month intervals. Equipment and vehicles which store, mix or transport hazardous materials will be inspected routinely, but not less than quarterly. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. All records shall be kept for a period of not less than 3 years.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test

and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.I.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. Unless covered by the General Permit for Construction Activity (57 FR 41209), the additional erosion control requirement for well drillings oil, sand, and shale mining areas are as follows:

(i) Site Description—Each plan shall provide a description of the following: 1) a description of the nature of the exploration activity; 2) estimates of the total area of the site and the area of the site that is expected to be disturbed due to the exploration activity; 3) an estimate of the runoff coefficient of the site; 4) a site map indicating drainage patterns and approximate slopes, the location of major control structures identified in the plan, and surface waters; and 5) the name of the receiving water(s) and the ultimate receiving water(s) of the runoff.

(ii) Controls—The pollution prevention plan shall include a description of controls appropriate for the activity and implement such controls. The description of controls shall address the following minimum components:

- A description of vegetative practices designed to preserve existing vegetation where attainable and revegetate open areas as soon as practicable after grade drilling. Such practices may include: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, and protection of trees. The operator shall initiate appropriate vegetative practices on all disturbed areas within 14 calendar days of the last activity at that area.
- A description of structural practices to the degree attainable divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas of the site. Such practices may include straw bale dikes, silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drain, pipe slope drain, level spreaders storm drain inlet protection, rock outlet protection, sediment traps, and temporary sediment basins.

(iii) Offsite vehicle tracking of sediments shall be minimized.

(iv) Procedures in a plan shall provide that all erosion controls on the site are inspected at least once every 7 calendar days.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide the measures that the permittee determines to be reasonable and appropriate which shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(j) RQ Release—The permittee must describe the measures taken to clean up RQ releases or related spills of materials, as well as measures proposed to avoid future releases of RQs. Such measures may include, among others: improved handling or storage techniques; containment around handling areas of liquid materials; and use of improved spill cleanup materials and techniques.

(k) Vehicle and Equipment Storage Areas—The storage of vehicles and equipment awaiting or having completed maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility may consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, and/or installation of berming and diking of this area.

(l) Vehicle and Equipment Cleaning and Maintenance Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The facility may consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all washwaters drain to a sanitary sewer, and/or collecting the storm water runoff from the cleaning area and providing treatment or recycling. The discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized by this permit and must be authorized under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance and rehabilitation. The facility may consider performing all

maintenance activities indoors, use of drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(m) Materials and Chemical Storage Areas—Storage units of all chemicals and materials (e.g., fuels, oils, used filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids, detergents drilling mud components, acids, organic additives) must be maintained in good condition so as to prevent contamination of storm water. Hazardous materials must be plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility may consider indoor storage of the materials and/or installation of berming and diking at the area.

(n) Chemical Mixing Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from chemical mixing areas. The facility may consider covering the mixing area, using spill and overflow protection, minimizing runon of storm water to the mixing area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling. The facility may consider installation of berming and diking of the area.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity (e.g., materials and chemical storage areas, vehicle and equipment cleaning and maintenance areas, vehicle and equipment storage areas, chemical mixing areas, and areas of materials handling at the drill site areas) shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.I.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.I.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, and major observations relating to the implementation of the storm water pollution prevention plan the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional requirements beyond those listed in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements.

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

J. Storm Water Discharges Associated With Industrial Activity From Mineral Mining and Processing Facilities

1. Discharges Covered Under This Section

a. Eligibility.

(1) This permit covers all existing point source discharges of storm water associated with industrial activity to waters of the United States from active and inactive mineral mining and processing facilities, generally identified by Standard Industrial Classification (SIC) Major Group 14, except for storm water discharges identified under paragraph XI.J.1.b.

(2) This permit may authorize storm water discharges associated with industrial activity that are mixed with storm water discharges associated with industrial activity from construction activities, provided that the storm water discharge from the construction activity is in compliance with the terms, including applicable Notice of Intent (NOI) or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

(b) Limitations on Coverage. The following storm water discharges associated with industrial activity are not authorized by this permit:

(1) Storm water discharges associated with industrial activity which are subject to an existing effluent limitation guideline, 40 CFR Part 436.

(2) Co-located Industrial Activities: When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. This section of today's proposed permit does not cover any discharge subject to process wastewater effluent limitation guidelines, including storm water that combines with process wastewater.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each storm water pollution prevention plan must describe industrial activities, significant materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows and mine pumpout. Plans must describe the following elements:

(a) Drainage—The plan must contain a map of the site that shows the pattern of storm water drainage, structural or nonstructural features that control pollutants in storm water runoff and process wastewater discharges, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal, haul roads, access roads, and rail spurs. In addition, the site map must also identify monitoring locations, if monitoring is required for the facility.

(b) Inventory of Exposed Materials—Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the effective date of the permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(c) Significant Spills and Leaks—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

(d) Sampling Data—Any existing data on the quality or quantity of storm water discharges from the facility must be described in the plan. The description should include a discussion of the methods used to collect and analyze the

data. Sample collection points should be identified in the plan and shown on the site map.

(e) Risk Identification and Summary of Potential Pollutant Sources—The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such industrial activities, significant materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids, total dissolved solids, etc.) associated with each source.

(3) Measures and Controls. Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. The permittee must assess the applicability of the following BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, sediment control and collection mechanisms, vegetation/soil stabilization, and capping of contaminated sources. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner.

(b) Preventive Maintenance—The maintenance program requires periodic removal of debris from discharge diversions and conveyance systems. These activities should be conducted in the spring, after snowmelt, and during the fall season. Permittees using ponds to control their effluents frequently use impoundments or sedimentation ponds as their BAT/BCT. Maintenance schedules for these ponds must be provided in the pollution prevention plan.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Operators of active facilities are required to conduct quarterly visual inspections of all BMPs. Temporarily and permanently inactive operations are required to perform annual inspections. The inspections shall include: (1) an assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures; (2) visual inspections of vegetative BMPs, serrated slopes, and benched slopes to determine if soil erosion has occurred; and (3) visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

The examination must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff event. Examinations shall be conducted in each of the following periods for the purposes of inspecting storm water quality associated with storm water runoff and snow melt: December to February (storm water runoff or snow melt); March to May (storm water runoff); June to August (storm water runoff); September to November (storm water runoff or snow melt).

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents such as spills or other discharges along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. The permittee must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be recorded and the date of their corrective action noted.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with part XI.J.3.a.(g)(iii) (Failure to Certify) of this permit.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water

discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify.—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe the procedure of any test conducted for the presence of non-storm water discharges to the storm sewer and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

Permittees must indicate the location and design for proposed BMPs to be implemented prior to land disturbance activities. For sites already disturbed but without BMPs, the permittee must indicate the location and design of BMPs that will be implemented. The permittee is required to indicate plans for grading, contouring, stabilization, and establishment of vegetative cover for all disturbed areas, including road banks. Reclamation activities must continue until final closure notice has been issued.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see Part XI.J.3.a.(2) (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. In addition, the permittee must describe the storm water pollutant source area or activity (i.e., loading and unloading operations, raw material storage piles etc.) to be controlled by each storm water management practice.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.J.3.a.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.J.3.a.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.J.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to 1) confirm the accuracy of the description of potential pollution sources contained in the plan, 2) determine the effectiveness of the plan, and 3) assess compliance with the terms and conditions of the permit. Comprehensive site compliance evaluations should be conducted twice a year for active facilities and once a year for temporary and permanently inactive sites. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires. Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

4. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements.

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

K. Storm Water Discharges Associated With Industrial Activity From Hazardous Waste Treatment, Storage, or Disposal Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. There are no additional requirements under this section other than those stated in Part III.A.

3. Storm Water Pollution Prevention Plan Requirements. Where a requirement under this section of the permit is similar to a requirement which the facility is subject to under RCRA, the facility must comply with the more stringent of the two conditions and report such conditions in the applicable section of the storm water pollution prevention plan.

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

a. Drainage.

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under part IV.D.3.c. (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and

an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., chemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., berms, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.K.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph (iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit

issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.K.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.K.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.K.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph (4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with hazardous waste treatment, storage, or disposal facilities (TSDFs) must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). TSDFs are required to monitor their storm water discharges for the pollutants of concern listed in Table K–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table K–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE K–1.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration
Ammonia	.093 mg/L.
Total Kjeldahl Nitrogen (TKN)	1.5 mg/L.
Total Recoverable Magnesium.	detection limit.
Chemical Oxygen Demand (COD).	65 mg/L.
Arsenic	0.000018 mg/L.
Total Recoverable Barium	1.0 mg/L.
Total Recoverable Cadmium	0.0018 mg/L.
Cyanide	detection limit.
Total Recoverable Lead	0.0337 mg/L.
Mercury	0.0024 mg/L.
Total Recoverable Selenium	0.02 mg/L.
Total Recoverable Silver	0.0009 mg/L.

(1) Monitoring Periods. TSDFs shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab

sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table K–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.B. of this permit.

b. Reporting. Permittees with TSDFs shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), TSDFs with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

L. Storm Water Discharges Associated With Industrial Activity From Landfills and Land Application Sites

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges associated with industrial activity from waste disposal at landfills and land application sites that receive or have received industrial wastes. Landfill and land application operators which have storm water discharges from other types of industrial activities such as vehicle maintenance, truck washing, composting, and/or recycling may be subject to additional requirements specified elsewhere in this permit.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. The discharge of leachate and vehicle and equipment washwaters to waters of the United States or a municipal separate storm sewer system is not authorized by this permit. The operators of such discharges must obtain coverage under a separate NDPES permit (other than this permit). Discharges from open dumps as defined under RCRA are also not authorized under this permit (e.g., leachate, runoff).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutant to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations of active and closed landfill cells or trenches, locations of active and closed land application areas, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, locations of any leachate collection and handling systems, locations where major spills or leaks identified under Part XI.L.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and locations of the following activities where such activities are exposed to precipitation: fueling station, vehicle and equipment maintenance and/or cleaning areas, and waste and other significant material loading/unloading and storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantities of chemicals used, produced or discharged; the likelihood of contact with storm water; and the history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, or disposed of in a manner to allow exposure to storm water between the time of the exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. The inventory of exposed materials

shall include, but shall not be limited to the significant material management practices employed.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water of sampling data collected during the term of this permit. Permittees shall also provide all available sampling data for leachate generated at the site.

(e) Risk Identification and Summary of Potential Pollutant Sources—Include a narrative description of potential pollutant sources associated with any of the following, providing they occur at the facility: fertilizer, herbicide and pesticide application; earth/soil moving; waste hauling and loading/unloading; outdoor storage of significant materials including daily, interim and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; failure or leaks from leachate collection and treatment systems haul roads; and vehicle tracking of sediments. The description shall specifically list any significant potential sources of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. Permittees shall consider providing protected materials storage areas for pesticides, herbicides, fertilizers, and other significant materials.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

Where applicable, permittees addressed by this section shall also: (1) maintain containers used for outdoor chemical and significant materials storage to prevent leaking or rupture; (2) maintain all elements of leachate collection and treatment systems to prevent commingling of leachate with storm water; and (3) maintain the integrity and effectiveness of any intermediate or final cover, including making repairs to the cover as necessary to minimize the effects of settlement, sinking, and erosion.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan.

(i) For operating landfills and land application sites, inspections shall be conducted at least once every 7 days and within 24 hours of a storm event. Qualified personnel shall inspect areas of landfills that have not yet been finally stabilized, active land application areas, areas used for storage of materials/wastes that are exposed to precipitation, stabilization and structural control measures, leachate collection and treatment systems, and locations where equipment and waste trucks enter and exit the site. Where landfill areas have been finally stabilized and where land application has been completed, or during seasonal arid periods in arid areas (areas with an average annual rainfall of 0 to 10 inches) and semiarid areas (areas with an average annual rainfall of 10 to 20 inches), inspections will be conducted at least once every month. Erosion and sediment control measures shall be observed to ensure they are operating correctly.

(ii) For inactive landfills and land application sites, inspections shall be conducted at least semiannually and at least 5 months apart, and qualified personnel shall inspect: landfill stabilization and structural erosion control measures and leachate collection and treatment systems, and all closed land application areas.

A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. The pollution prevention plan shall be revised to address any problems found during inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as conducting inspections, spill response, good housekeeping, conducting inspections and material management practices. The pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. Landfill operators shall provide for a tracking system for the types of wastes disposed of in each cell or trench of a landfill. Land application site operators shall track the types and quantities of wastes applied in specific areas.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges including leachate and vehicle wash waters. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed

during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.L.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 180 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date of permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

Landfill operators shall provide for temporary stabilization of materials stockpiled for daily, intermediate and final cover. Stabilization practices to consider include but are not limited to temporary seeding, mulching, and placing geotextiles on the inactive portions of the stockpiles.

Landfill operators shall provide for temporary stabilization of inactive areas of the landfill which have an intermediate cover but no final cover.

Landfill operators shall provide for temporary stabilization of any landfill areas which have received a final cover until vegetation has established itself. Land application site operators shall also stabilize areas where waste application has been completed until vegetation has been established.

Landfill operators shall provide for temporary stabilization of any landfill areas which have received a final cover until vegetation has established itself. Land application site operators shall also stabilize areas where waste application has been completed until vegetation has been established.

(i) Management of Runoff—The plan shall also contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.L.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: silt fences, earth dikes, gradient terraces, drainage swales, sediment traps, check dams, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. Structural practices should be placed on upland soils as practicable.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity at landfill and land application sites shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.L.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.L.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations

There are no additional numeric effluent limitations beyond those in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit

issuance], permittees with landfill/land application sites (except those that are closed in accordance with 40 CFR 258.60) must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Landfill/land application sites are required to monitor their storm water discharges for the pollutants of concern listed in Table L–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table L–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE L–1.—INDUSTRY MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Total Suspended Solids (TSS)[1]	100
Total Phosphorus[2]	0.33
Total Recoverable Iron[2]	0.3
Total Recoverable Lead[2]	0.0337

[1] Applicable to all landfill and land application sites.
[2] Applicable to all facilities except MSWLF areas closed in accordance with 40 CFR 258.60 requirements.

(1) Monitoring Periods. Landfill/land application sites shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable, permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph 5.a.(1) (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (e.g., drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table L–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity, that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of the fact sheet to this permit.

b. Reporting. Permittees with landfill/land application sites shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained

during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet to this permit.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above) landfill/land application sites, with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

6. Definition

"Inactive Landfill"—For the purposes of this permit, a landfill is considered inactive when, on a permanent basis, it will no longer receive waste and has completed closing in accordance with any applicable Federal, State, and/or local requirements.

M. Storm Water Discharges Associated With Industrial Activity From Automobile Salvage Yards

1. Discharges Covered Under This Section

The requirements of this section apply to point source discharges of storm water associated with industrial activity from facilities engaged in dismantling or wrecking used motor vehicles for parts recycling or resale and for scrap, including those facilities classified as Standard Industrial Classification (SIC) Code 5015.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall

address all aspects of the facility's storm water pollution prevention plan.

(2) *Description of Potential Pollutant Sources.* Each storm water pollution prevention plan must describe industrial activities, significant materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows. Plans must include the following elements:

(*a*) *Site Map*—The plan must contain a map of the site that shows structural features that control pollutants in storm water runoff[5] and process wastewater discharges, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the effective date of this permit. The map must also indicate the flow direction of storm water runoff. The location of each storm water outfall associated with an industrial activity, as well as an outline of the drainage area for each storm water outfall must be indicated. The map must indicate the location of each monitoring point. The map must include an estimation (in acres) of the total area used for industrial activity including, but not limited to, dismantling, storage, and maintenance of used motor vehicles and motor vehicle parts. The map must also indicate the location of the following activities where such activities are exposed to precipitation: vehicle storage areas; dismantling areas; parts storage areas, including engine blocks, tires, hub caps, batteries, hoods, and mufflers; fueling stations; vehicle and equipment maintenance areas; cleaning areas (parts, vehicles, and/or equipment); loading and unloading areas; locations used for the treatment, storage, and disposal of wastes; and liquid storage tanks and drums for fuel and other fluids.

(*b*) *Inventory of Potential Pollutant Sources*—Facility operators are required to carefully conduct an inspection of the site to identify significant materials exposed to precipitation that may contribute pollutants to storm water discharges. The inventory must address materials that within 3 years prior to the effective date of the permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that prohibit/control process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or through a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(*c*) *Significant Spills and Leaks*—The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the effective date of the permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance. Such list shall be updated as appropriate during the term of the permit.

(*d*) *Sampling Data*—Any existing data or data collected during the term of this permit describing the quality or quantity of storm water discharges from the facility must be summarized in the plan. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

(*e*) *Summary of Potential Pollutant Sources*—The description of potential pollution sources should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water discharges. Any such industrial activities, significant materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the potential for the following activities to contribute pollutants: vehicle storage areas; dismantling areas; parts storage areas, including engine blocks, tires, hub caps, batteries, and hoods; fueling stations; vehicle and equipment maintenance areas; cleaning areas (parts and vehicles and/or equipment); loading/unloading areas; locations used for the treatment, storage, and disposal of wastes; and liquid storage tanks and drums for fuel and other fluids.

The assessment must identify the pollutant parameter or parameters (i.e., copper, iron, lead, oil and grease, total suspended solids, etc.) associated with each pollutant source.

(3) *Measures and Controls.* Following completion of the source identification and assessment phase, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

(*a*) *Good Housekeeping*—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner.

(*b*) *Preventive Maintenance*—The preventive maintenance program shall schedule periodic inspections and ensure appropriate maintenance of storm water management devices and facility equipment and systems. This program will address conditions that could cause breakdowns or failures resulting in the discharge of pollutants to surface waters. The maintenance program shall include periodic removal of debris from discharge diversions, conveyance systems, and impoundments/ponds. These activities should be conducted in the spring, after snow melt, and during the fall season. Maintenance schedules for sedimentation/impoundments must be provided in the pollution prevention plan.

(*c*) *Spill and Leak Prevention and Response Procedures*—Areas where potential spills which can contribute pollutants to storm water discharges can

[5] Features such as grass swales and vegetative buffer strips also should be shown.

occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel. After clean up from a spill, absorbants must be promptly placed in containers for proper disposal. All vehicles that are intended to be dismantled must be properly drained of all fluids upon arrival at the site, or as soon as feasible thereafter, or other equivalent means must be taken to prevent leaks or spills of such fluids.

(*d*) *Inspections*—Upon arrival at the site, or as soon as feasible thereafter, vehicles must be inspected for leaks. Any equipment containing oily parts, hydraulic fluids, or any other types of fluids shall be inspected at least quarterly (four times per year) for signs of leaks. Any outdoor storage of fluids including, but not limited to, brake fluid, transmission fluid, radiator water, and antifreeze, must be inspected at least quarterly for leaks. All outdoor liquid storage containers (e.g., tanks, drums) must be inspected at least quarterly for leaks.

Qualified facility personnel are required to conduct quarterly visual inspections of BMPs. The inspections shall include: 1) an assessment of the integrity of storm water flow diversion and source minimization systems; 2) visual inspections of dismantling areas, vehicle and equipment maintenance areas, vehicle, equipment, and parts cleaning and storage areas, and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water.

Examinations shall be conducted in each of the following periods: December to February; March to May; June to August; and September to November.

Reports of the quarterly inspections (or more frequent if appropriate) shall be retained as part of the plan. Based on the results of each inspection the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

(*e*) *Employee Training*—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. The pollution prevention plan shall identify how often training will take place, but in all cases, training must be held at least twice a year. Employee training must, at a minimum, address the following areas when applicable to a facility: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, and solvents; spill prevention and response; fueling procedures; good housekeeping practices; and used battery management.

(*f*) *Recordkeeping and Internal Reporting Procedures*—A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. The permittee must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be reported and the date of their corrective action noted. Employees must report incidents of leaking fluids to facility management and document such leaks in the plan. The facility must also:

- Maintain records (gallons per month) of drained waste oil, anti-freeze, mineral spirits, and gasoline
- Identify by name and EPA or State identification number (if any) all transporters, recyclers, and disposal facilities of used waste oil, antifreeze, mineral spirits, batteries, scrap metal, and tires
- Maintain records (gallons per month) of waste oil, anti-freeze, gasoline, freon, batteries, scrap materials, and tires that are sent to recyclers
- Maintain records of the number of batteries removed from cars and sold or recycled per month.

(*g*) *Non-storm Water Discharges*

(*i*) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part XI.M.2.b.(3)(g)(iii) (Failure to Certify) of this permit.

(*ii*) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(*iii*) *Failure to Certify*—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(*h*) *Sediment and Erosion Control*—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. Permittees must consider measures to maximize stabilization of industrial areas using vegetative cover, gravel, impervious surfaces or other appropriate measures.

(*i*) *Management of Runoff*—The plan shall contain a narrative consideration of the appropriateness of traditional

storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide measures that the permittee determines to be reasonable and appropriate and shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Part XI.M.2.a.(2) (Description of Potential Pollutant Sources) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. In addition, the permittee must describe the storm water pollutant source area or activity (e.g., dismantling area, storage area, cleaning operations) to be controlled by each storm water management practice.

The plan must consider management practices, such as berms or drainage ditches on the property line, that may be used to prevent runon from neighboring properties. Berms must be considered for uncovered outdoor storage of oily parts, engine blocks, and above ground liquid storage. The installation of detention ponds must also be considered. The permittee shall consider the installation of a filtering device to receive runoff from industrial areas. The installation of oil/water separators must also be considered.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan in no case less than twice a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.M.2.a.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.M.2.a.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.M.2.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to 1) confirm the accuracy of the description of potential pollution sources contained in the plan, 2) determine the effectiveness of the plan, and 3) assess compliance with the terms and conditions of the permit. Comprehensive site compliance evaluations should be conducted twice a year. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

(e) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

Based on the results of each inspection, the description of potential pollution sources, and measures and controls, the plan must be revised as appropriate within 2 weeks after each inspection. Changes in the measures and controls must be implemented on the site in a timely manner, and never more than 12 weeks after completion of the inspection.

3. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

4. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees operating automobile salvage yards must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 4.a.(3) (Sampling Waiver), 4.a.(4) (Representative Discharge), and 4.a.(5) (Alternative Certification). Automobile salvage yards are required to monitor their storm water discharges for the pollutants of concern listed in Table M–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table M–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE M–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration
Chemical oxygen demand	65 mg/L.
pH	6 to 9 s.u.
Total Suspended Solids	100 mg/L.
Total Kjeldahl Nitrogen	1.5 mg/L.
Nitrate plus Nitrite as Nitrogen	0.68 mg/L.

(1) Monitoring Periods. Automobile salvage yards shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such

samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

EPA requests comments upon a condition of today's proposed permit that would require permittees who are unable to sample storm water discharges before they commingle with non-storm water discharges to sample the combined discharge both during dry and wet weather and submit both sets of data to the permitting authority.

(3) *Sampling Waiver*

(a) *Adverse Conditions*—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (e.g., drought, extended frozen conditions, etc.).

(b) *Low Concentration Waiver*—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table M–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility which drains to the outfall for which sampling was waived.

(4) *Representative Discharge.* When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) *Alternative Certification.* A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity, that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with automobile salvage yards shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.C. of the fact sheet.

(1) *Additional Notification.* In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), automobile salvage yards with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72

hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (e.g., drought, extended frozen conditions, etc.).

5. Retention of Records

The permittee shall retain records of all inspections and monitoring information, including certification reports, noncompliance reports, calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, and supporting data, requested by the permitting authority for at least 3 years after the date that the permit expires.

N. Storm Water Discharges Associated With Industrial Activity From Scrap and Waste Material Processing and Recycling Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from the following activities: facilities that are engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, and glass. These types of activities are typically identified by Standard Industrial Classification (SIC) 5093. Facilities that are engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits and industrial solvents and which are classified under SIC 5093 are also covered under this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges

(1) Except as provided in paragraph XI.N.2.b., all discharges covered by this permit shall be composed entirely of storm water.

(a) Except as provided in paragraph XI.N.2.b. (below), discharges of material other than storm water to waters of the United States, or through municipal separate storm sewer systems, are not authorized by this permit. The operators of such discharges must obtain coverage under a separate National Pollutant Discharge Elimination System (NPDES) permit (other than this permit) issued for the discharge.

(b) The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with paragraph XI.N.3.a.(3) (Measures and Controls for Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents are not used; air conditioning condensate; springs; and uncontaminated ground water.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The following general requirements for the storm water pollution prevention plan are applicable to activities which reclaim and recycle either recyclable nonliquid and liquid waste materials. In addition to the general requirements, Paragraph XI.N.3.a.(3)(a) (below) identifies special requirements for scrap and waste recycling facilities that handle nonliquid wastes and paragraph XI.N.3.a.(3)(b) (below) identifies special requirements for waste recycling facilities that handle only liquid wastes. The plan shall include, at a minimum, the following items:

(1) *Pollution Prevention Team.* Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) *Description of Potential Pollutant Sources.* Each plan shall provide a description of potential sources which may reasonably be expected to add

significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources or, during periods of dry weather, result in dry weather flows. Each plan shall include, at a minimum:

(*a*) *Drainage*

(*i*) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies (including wetlands), locations where significant materials are exposed to precipitation including scrap and waste material storage and outdoor scrap and waste processing equipment, locations where major spills or leaks identified in paragraph XI.N.3.a.(2)(c) of this section have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, material storage (including tanks or other vessels used for liquid or waste storage). The site map must also identify monitoring locations.

(*ii*) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(*b*) *Inventory of Exposed Materials*—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(*c*) *Spills and Leaks*—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of the Clean Water Act (CWA) (see 40 CFR 110.10 and 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance. Such a list shall be updated as appropriate during the term of the permit.

(*d*) *Sampling Data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(*e*) *Risk Identification and Summary of Potential Pollutant Sources*—A narrative description of potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities, outdoor processing activities; significant dust or particulate generating processes and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., Chemical Oxygen Demand (COD), oil and grease, Total Suspended Solids (TSS), zinc, lead, copper, etc.) of concern shall be identified.

(*3*) *Measures and Controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls for scrap and waste recycling facilities (nonliquid recyclable wastes) and waste recycling facilities (recyclable liquid wastes) are identified in Parts XI.N.3.a.(3)(a) and XI.N.3.a.(3)(b), respectively. At a minimum, the description shall also include a schedule for implementing such controls:

(a) Scrap and Waste Recycling Facilities (nonliquid recyclable wastes)—The following special conditions have been established for the pollution prevention plan for those scrap and waste recycling facilities that receive, process and provide wholesale distribution of nonliquid recyclable wastes, (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). Under the description of measures and controls in the storm water pollution prevention plan, the plan will address all areas that have a reasonable potential to contribute pollutants to storm water discharges and will be maintained in a clean and orderly manner. At a minimum, the plan will address the following activities and areas within the plan:

(i) Inbound Recyclable and Waste Material Control Program—The plan shall include a recyclable and waste material inspection program to minimize the likelihood of receiving materials that may be significant pollutant sources to storm water discharges. At a minimum, the plan shall address the following:

- Measures to encourage suppliers of scrap and recyclable waste materials to drain residual fluids, whenever applicable, prior to its arrival at the facility. This includes vehicles and equipment engines, radiators, and transmissions, oil-filled transformers, white goods (appliances) and individual containers or drums;
- Activities which accept scrap and materials that may contain residual fluids, e.g., automotive engines containing used oil, transmission fluids, etc., shall describe procedures to minimize the potential for these fluids from coming in contact with either precipitation or runoff. The description shall also identify measures or procedures to properly store, handle and dispose of these residual fluids;
- Procedures pertaining to the acceptance of scrap lead-acid batteries. Additional requirements for the handling, storage and disposal or recycling of batteries shall be in conformance with conditions for a scrap lead-acid battery program, see paragraph XI.N.3.a.(3)(a)(v) (below);
- A description of training requirements for those personnel engaged in the inspection and acceptance of inbound recyclable materials.

• Liquid wastes, including used oil, shall be stored in materially compatible and nonleaking containers and disposed or recycled in accordance with all requirements under the Resource Recovery and Conservation Act (RCRA), and other State or local requirements.

• All industrial turnings and cuttings shall be handled in such a manner as to prevent exposure to either precipitation or storm water runoff. Runoff or precipitation that comes in contact with turnings and cuttings shall be discharged into a sump, sanitary sewer, oil/water separator or other equivalent measure to prevent the discharge of reportable quantities of oil.

(ii) Scrap and Waste Material Stockpiles/Storage (outdoors)—The plan shall address all areas where significant materials are exposed to either storm water runoff or precipitation. The plan shall describe those measures and controls used to minimize contact of storm water runoff and precipitation with those areas where scrap and recyclable wastes are stockpiled. The plan shall also describe additional measures and controls that are appropriate to minimize contact of any scrap and waste materials that have undergone further processing, (e.g., shredding, baling and compacting, from coming in contact with precipitation or storm water runoff). This includes procedures for the storage and disposal of nonrecyclable wastes and labeling or marking of containerized wastes. The plan shall consider the use, either individually or in combination, of the following Best Management Practices (BMPs) or their equivalent to minimize contact with storm water runoff:

• Diversion devices or structures such as dikes, berms, culverts, containment trenches, elevated concrete pads and/or grading around stockpile areas;

• Permanent or semipermanent covers, or other similar forms of protection over stockpiled materials. This may also include the use of containment bins or covered dumpsters for processed scrap and recyclable waste materials and nonrecyclable waste materials;

• Retention and detention basins, ponds, sediment traps and/or vegetate swales and strips, to facilitate settling and/or filtering out of pollutants in runoff from material stockpile areas.

• Media filtration such as catch basin filters and sand filters; and

• Oil/water separators and dry absorbents in stockpile areas that are potential sources of residual petroleum-based fluids.

(iii) Scrap and Waste Material Stockpiles/Storage (covered or indoor storage)—The plan shall address measures and controls to minimize residual liquids and accumulated particulate matter, originating from scrap and recyclable waste materials stored indoors or under cover, from coming in contact with surface runoff. This portion of the plan shall include the following:

• Good housekeeping measures, including the use of dry absorbent clean up methods, to collect, handle, store and dispose or recycle residual liquids originating from recyclable containers, e.g., beverage containers, paint cans, household cleaning products containers, etc.;

• Prohibiting the practice of washing down tipping floors or other material processing areas;

• Disconnecting or sealing off all existing floor drains connected to any portion of the storm sewer system.

(iv) Scrap and Recyclable Waste Processing Equipment—The plan shall address all areas where scrap and recyclable waste processing equipment are sited. This includes measures and controls to minimize surface runoff from coming in contact with scrap and recyclable waste processing equipment. The plan will specifically address measures to minimize and, wherever feasible, eliminate contact of liquids, e.g., hydraulic fluids, fuel, oils, lubricants and accumulated particulate matter with storm water runoff and precipitation. At a minimum, the plan shall include the following:

• A schedule of periodic inspections of equipment for leaks, spills, malfunctioning, worn or corroded parts or equipment;

• Preventive maintenance program to repair and/or maintain processing equipment according to manufacturer's recommendations;

• Measures to minimize the exposure of precipitation or runoff to processed materials (e.g., shredded scrap, fluff);

• High level alarms or other equivalent protection devices on unattended hydraulic reservoirs over 150 gallons in capacity; and

• In addition to the requirements identified above, the plan shall consider the use of one, or a combination, of the following BMPs or other equivalent practices (note: the permittee may identify BMPs that mutually satisfy requirements for this paragraph and other sections of this permit that address other sources of pollutants, e.g., outdoor material stockpiles): diversion structures such as dikes, berms, culverts, containment trenches, elevated concrete pads, grading to minimize contact of storm water runoff with outdoor processing equipment; oil/water separators, sumps, or dry absorbents in processing areas that are potential sources of residual petroleum-based compounds and grease; permanent or semipermanent covers, or other similar measures; retention and detention basins, ponds, sediment traps or vegetated swales and strips, to facilitate settling or filtering out of pollutants in runoff from scrap and recyclable waste processing areas; and/or media filtration such as catch basin filters and sand filters.

(v) Scrap Lead-Acid Battery Program—The plan shall address measures and controls for the proper handling, storage and disposition of scrap lead-acid batteries. The plan shall include the following:

• All scrap lead-acid batteries shall be segregated from other scrap materials;

• Description of procedures and/or measures for the handling, storage and proper disposal of cracked or broken batteries;

• Description of measures to collect and dispose of leaking battery fluid (lead-acid);

• Description of measures to minimize and, whenever possible, eliminate exposure of scrap lead-acid batteries to precipitation or runoff; and

• Description of employee training for the management of scrap batteries.

(vi) Erosion and Sediment Control—The plan shall identify all areas associated with industrial activity that have a high potential for soil erosion. Appropriate stabilization measures, nonstructural and structural controls shall be provided in these areas. The plan shall contain a narrative consideration of the appropriateness for selected erosion and sediment controls. In addition, the plan shall identify nonstructural and structural controls necessary to minimize TSS loadings from those areas that tend to experience a buildup of visible amounts of particulate matter. The plan shall consider the use of one or a combination of the following BMPs:

• Filtering or diversion practices, such as filter fabric fence, sediment filter boom, earthen or gravel berms, curbing or other equivalent measure, placed around exposed significant materials, scrap processing equipment and inlets or catch basins;

• Inlet or catch basin filters or equivalent, place in, or around, inlets or catch basins that receive runoff from scrap and waste storage areas, and processing equipment; and

• Sediment traps, vegetative buffer strips or swales, or equivalent, that effectively trap or remove sediment prior to discharge through an inlet or catch basin. Grassy swales or strips may

also include additional enhancements such as check dams.

(vii) Structural Controls for Sediment and Erosion Control—In instances where significant erosion and suspended solids loadings continue after installation of one or more of the BMPs identified in paragraph XI.N.3.a.(3)(a)(vi) (above), the plan shall include a detention or retention basin or other equivalent measure. All structural controls shall be designed using good engineering practice. All structural controls and outlets that are likely to receive discharges containing oil and grease shall include measures to minimize discharge of oil and grease through the outlet riser.

(viii) Spill Prevention and Response Procedures—Spills are most likely to occur during processing or loading and unloading of materials. Common causes of spills or leaks include container failures, equipment leaks, and materials handling. Frequent inspections of storage areas and processing equipment will reduce the likelihood that faulty containers and processing equipment will go unnoticed. Employee education and training described below should also reduce the chance of spills occurring. The plan shall include the following practices:

- The plan shall describe spill prevention and response measures to address areas that are potential sources of leaks or spills of fluids;
- All visible leaks and spills shall be contained and cleaned up as soon as possible. If malfunctioning equipment is responsible for the spill or leak, repairs shall also be conducted as soon as possible;
- Cleanup procedures shall be identified in the plan, including the use of dry absorbent materials. The plan shall provide that an adequate supply of dry absorbent material shall be maintained onsite, and used absorbent material shall be cleaned up and disposed of properly;
- Drums containing liquids, including oil and lubricants, shall be stored indoors; or in a bermed area; or in overpack containers or spill pallets; or in similar containment devices;
- Overfill prevention devices shall be installed on all fuel pumps and tanks;
- Drip pans or equivalent measures shall be placed under any leaking piece of stationary equipment until the leak is repaired. The drip pans must be inspected for leaks and checked for potential overflow. They will be emptied regularly to prevent overflow and all liquids will be disposed of in accordance with all requirements under RCRA, and other State and local requirements.
- An alarm and/or pump shut off system shall be installed and maintained on all outside equipment with hydraulic reservoirs exceeding 150 gallons in order to prevent draining the tank contents if a line breaks, provided all parts of the hydraulic system are not visible to the operator of the processing equipment. As an alternative, such equipment may have a secondary containment system capable of containing the contents of the hydraulic reservoir.

(ix) Monthly Inspection Program—Aside from the annual site compliance inspection, monthly visual inspections shall be conducted by a member or members of the storm water pollution prevention team. The monthly inspection will include all designated areas of the facility and equipment identified in the plan. The inspection will include a means of tracking and conducting follow up actions based on the results of the inspection. At a minimum, the visual inspection shall include the following areas:

- All outdoor scrap processing areas;
- All material unloading and loading areas (including rail sidings) that are exposed to either precipitation or storm water runoff;
- Areas where structural BMPs have been installed;
- Areas where spills and leaks have occurred in the past;
- All erosion and sediment BMPs;
- Outdoor vehicle and equipment maintenance areas, if applicable;
- Vehicle and equipment fueling areas;
- All areas where waste is generated, received, stored, treated, or disposed and which are exposed to either precipitation or storm water runoff.
- The inspection will include identification of the following if potentially exposed to storm water, corroded and leaking containers, corroded or leaking pipes, leaking or improperly closed valves and valve fittings, leaking pumps and/or hose connections, and breaks in physical barriers used to prevent storm water from reaching stored materials.
- Any spills or leaks identified during the visual inspection will be immediately addressed using the procedures identified in Part XI.N.3.a.(3)(a)(viii) (Spill Prevention and Response Procedures). Structural BMPs will be visually inspected for signs of washout, breakage, deterioration, damage, or overflowing and breaks will be repaired or replaced as expeditiously as possible.

(x) Employee Training—At a minimum, training appropriate to their job function shall be provided for truck drivers, scale operators, supervisors, buyers and operating personnel. The plan shall include a proposed schedule for the training. The employee training program shall address: BMPs and other requirements of the plan; proper scrap inspection, handling and storage procedures; procedures to follow in the event of a spill, leak, or break in any structural BMP. A training and education program shall be developed for employees and for suppliers for implementing activities identified in the storm water pollution prevention plan.

(xi) Supplier Notification—The plan shall include a supplier notification program that will be applicable to major suppliers and shall include: description of scrap materials that will not be accepted at the facility or that are accepted only under certain conditions; and the potential liability for future onsite and offsite cleanup costs if hazardous substances are contained in scrap that is delivered to the facility.

(b) Waste Recycling Facilities (liquid recyclable wastes)—The following special conditions have been established for the pollution prevention plan for those facilities that reclaim and recycle liquid wastes (e.g., used oil, antifreeze, mineral spirits, and industrial solvents). For these facilities, the storm water pollution prevention plan will address all areas that have a reasonable potential to contribute pollutants to storm water discharges and will be maintained in a clean and orderly manner. At a minimum, the plan will address the following activities and areas within the plan:

(i) Waste Material Storage (indoors)—The plan shall address measures and controls to minimize/eliminate residual liquids from waste materials stored indoors from coming in contact with surface runoff. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. At a minimum, the plan shall include the following:

- Procedures for material handling (including labeling and marking);
- A sufficient supply of dry-absorbent materials or a wet vacuum system to collect spilled or leaked materials;
- An appropriate containment structure, such as trenches, curbing, gutters or other equivalent measures; and
- Drainage system to handle discharges from diked or bermed areas. The drainage system shall include appurtenances, (e.g., pumps or ejectors, manually operated valves). Drainage shall be discharged to an appropriate treatment facility, sanitary sewer system, or otherwise disposed of properly. Discharges from these areas

shall be covered by a separate NPDES permit or industrial user permit under the pretreatment program.

(ii) Waste Material Storage (outdoors)—The plan shall address areas where significant materials are exposed to either storm water runoff or precipitation. The plan shall include measures to provides appropriate containment, drainage control and other appropriate diversionary structures. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. At a minimum, the plan shall describe those measures and controls used to minimize contact of storm water runoff with stored materials. The plan shall also include the following preventative measures or the equivalent:

- An appropriate containment structure such as dikes, berms, curbing or pits, or other equivalent measures;
- The containment shall be sufficient to store the volume of the largest single tank and shall include sufficient freeboard for precipitation;
- A sufficient supply of dry-absorbent materials or a wet vacuum system, or other equivalent measure, to collect liquids from minor spills and leaks in contained areas; and
- Discharges of precipitation from contained areas containing used oil shall be in accordance with applicable sections of 40 CFR Part 112.

(iii) Truck and Rail Car Waste Transfer Areas—The plan shall describe measures and controls for truck and rail car loading and unloading areas. This includes appropriate containment and diversionary structures to minimize contact with precipitation or storm water runoff. The plan shall also address measures to clean up minor spills and/or leaks originating from the transfer of liquid wastes. This may include the use of dry-clean up methods, roof coverings, runoff controls, or other equivalent measures.

(iv) Erosion and Sediment Control—The plan shall identify all areas associated with industrial activity that have a high potential for soil erosion. Appropriate stabilization measures, nonstructural and structural controls shall be provided in these areas. The plan shall contain a narrative consideration of the appropriateness for selected erosion and sediment controls. Where applicable, the facility shall consider the use of the following types of preventive measures: sediment traps; vegetative buffer strips; filter fabric fence; sediment filtering boom; gravel outlet protection; or other equivalent measures that effectively trap or remove sediment prior to discharge through an inlet or catch basin.

(v) Spill Prevention and Response Procedures—The plan shall address measures and procedures to address potential spill scenarios that could occur at the facility. This includes all applicable handling and storage procedures, containment and/or diversion equipment, and clean-up procedures. The plan shall specifically address all outdoor and indoor storage areas, waste transfer areas, material receiving areas (loading and unloading), and waste disposal areas.

(vi) Monthly Site Inspections—In addition to the annual site compliance evaluation, the facility shall conduct monthly visual inspections by a member or members of the storm water pollution prevention team. The monthly inspection shall include all designated areas of the facility and equipment identified in the plan. The inspection shall include a means of tracking and conducting follow up actions based on the results of the inspection. At a minimum, the visual inspection shall include the following areas:

- Material storage areas;
- Material unloading and loading areas (including rail sidings) that are exposed to either precipitation or storm water runoff;
- Areas where structural BMPs have been installed;
- All erosion and sediment BMPs;
- Outdoor vehicle and equipment maintenance areas (if applicable);
- Vehicle and equipment fueling areas (if applicable);
- All areas where waste is generated, received, stored, treated, or disposed and which are exposed to either precipitation or storm water runoff; and
- If exposed to precipitation or storm water runoff, the inspection shall identify corroded or leaking containers, corroded or leaking pipes, leaking or improperly closed valves and valve fittings, leaking pumps and/or hose connections, and deterioration in diversionary or containment structures. Any spills or leaks shall be immediately addressed according to the facility's spill prevention and response procedures.

(c) Recordkeeping and Internal Reporting Procedures—The following record and internal reporting procedures are applicable to all discharges seeking coverage under this permit. The plan shall include a description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. The plan must address spills, monitoring, and BMP inspection and maintenance activities. BMPs which are ineffective must be reported and the date of their corrective action noted. Employees must report incidents of leaking fluids to facility management and these reports must be incorporated into the plan.

(d) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.N.3.a.(3)(d)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test

conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.N.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.N.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.N.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel shall conduct to 1) confirm the accuracy of the description of potential pollution sources contained in the plan, 2) determine the effectiveness of the plan, and 3) assess compliance with the terms and conditions of the permit. Comprehensive site compliance evaluations should be conducted once per year. The individual or individuals who shall conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with scrap and waste material processing and recycling facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Scrap and waste material processing and recycling facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table N–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table N–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE N–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Chemical Oxygen Demand (COD)	[illegible]
Total Kjeldahl Nitrogen (TKN)	1.5
Nitrate + Nitrite Nitrogen	[illegible]
Total Recoverable Aluminum	0.75
Total Recoverable Cadmium	0.0018
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
PCBs	0.00000044
Total Recoverable Zinc	0.065
Total Recoverable Arsenic	0.000018

(1) Monitoring Periods. Scrap and waste material processing and recycling facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable, permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph 5.a.(1). (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel

(such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (e.g., drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table N–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity, that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with scrap and waste material processing and recycling facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results (or a certification in accordance with Sections (3), (4), or (5) above) obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), scrap and waste material processing and recycling facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

(c) Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

3. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or

high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

O. Storm Water Discharges Associated With Industrial Activity From Steam Electric Power Generating Facilities, Including Coal Handling Areas

1. Discharges Covered Under This Section

2. Eligibility. The requirements listed under this section shall apply to storm water discharges from steam electric power generating facilities, including coal handling areas. Non-storm water discharges subject to effluent limitations guidelines are not covered by this permit. Storm water discharges from coal pile runoff subject to numeric limitations are eligible for coverage under this permit, but are subject to the limitations established by 40 CFR 423.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

b. Limitations on Coverage. Storm water discharges from ancillary facilities such as fleet centers, gas turbine stations, and substations that are not contiguous to a steam electric power generating facility are not covered by this permit. Heat capture co-generation facilities are not covered by this permit; however, dual fuel co-generation facilities are included.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Except as provided under Part III.A. of this permit, non-storm water discharges are not authorized by this permit. The operators of such discharges must obtain coverage under a separate National Pollutant Discharge Elimination System (NPDES) permit if discharged to waters of the United States or through a municipal separate storm sewer system. Storm water discharges associated with industrial activities that are mixed with sources of non-storm water are not authorized by this permit, except if mixed with non-storm water discharges that are in compliance with a different NPDES permit or identified by and in compliance with Part III.A. (Prohibition of Non-storm Water Discharges) of this permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map which clearly outlines the locations of the following, as they apply to the facility: Each point of discharge of storm water associated with industrial activity, and an outline of the drainage area of each storm water outfall that is within the facility boundaries (and indicating the direction of storm water flow); processing areas and buildings; treatment ponds; locations where significant materials are exposed to precipitation; storage tanks; scrap yards, and general refuse areas; fuel storage and distribution areas; vehicle and equipment maintenance and storage areas; loading/unloading areas; locations used for treatment, storage or disposal of wastes; location of short and long term storage of general materials (including but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizers, and pesticides); landfills; location of construction sites; locations of stock pile areas (such as coal piles and limestone piles); locations where major spills or leaks identified under Part XI.O.3.a.(2)(c) (Spills and Leaks) of this permit have occurred; surface water bodies; and existing structural control measures to reduce pollutants in storm water runoff (such as bermed areas, grassy swales, etc.).

(ii) For each storm water outfall identify the types of pollutants which are likely to be present in the storm water discharges. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff;

and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., total suspended solids, copper, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed:

(i) Fugitive Dust Emissions—The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The facility shall establish procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.

(ii) Delivery Vehicles—The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the facility must:

- Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and
- Develop procedures to deal with leakage or spillage from vehicles or containers, and ensure that proper protective measures are available for personnel and environment.

(iii) Fuel Oil Unloading Areas—The plan must describe measures that prevent or minimize contamination of storm water runoff from fuel oil unloading areas. At a minimum the facility must use the following measures or their equivalent:

- Use containment curbs in unloading areas;
- During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up; and
- Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors).

(iv) Chemical Loading/Unloading Areas—The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. At a minimum the permittee must use the following measures or their equivalent:

- Use containment curbs at chemical loading/unloading areas to contain spills; and
- During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.

Where practicable, chemical loading/unloading areas should be covered, and chemicals should be stored indoors.

(v) Miscellaneous Loading/Unloading Areas—The plan must describe measures that prevent or minimizes the contamination of storm water runoff from loading and unloading areas. The facility may consider covering the loading area, minimizing storm water runon to the loading area by grading, berming, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be contained in existing containment and flow diversion systems.

(vi) Liquid Storage Tanks—The plan must describe measures that prevent or minimize contamination of storm water runoff from above ground liquid storage tanks. At a minimum the facility must employ the following measures or their equivalent:

- Use protective guards around tanks;
- Use containment curbs;
- Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and
- Use dry cleanup methods.

(vii) Large Bulk Fuel Storage Tanks—The plan must describe measures that prevent or minimize contamination of storm water runoff from liquid storage tanks. At a minimum the facility must employ the following measures or their equivalent:

- Comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC); and
- Containment berms.

(viii) The plan must describe measures to reduce the potential for an oil spill, or a chemical spill. At a minimum the structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on a weekly basis. All repairs deemed necessary based on the findings of the inspections will be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

(ix) Oil Bearing Equipment in Switchyards—The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas. The facility may consider level grades and gravel surfaces to retard flows and limit the spread of spills; collection of storm water runoff in perimeter ditches.

(x) Residue Hauling Vehicles—All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds must be repaired as soon as practicable.

(xi) Ash Loading Areas—Plant procedures shall be established to reduce and/or control the tracking of ash or residue from ash loading areas including, where practicable, requirements to clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before each loaded vehicle departs.

(xii) Areas Adjacent to Disposal Ponds or Landfills—The plan must

describe measures that prevent or minimize contamination of storm water runoff from areas adjacent to disposal ponds or landfills. The facility must develop procedures to:

- Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and
- Reduce ash residue on exit roads leading into and out of residue handling areas.

(xiii) Landfills, Scrapyard, General Refuse Sites—For landfills, scrapyards, and general refuse sites the permittee shall use the applicable Best Management Practices (BMPs) outlined in Part XI.L. of the permit (Storm Water Discharges Associated With Industrial Activity From Landfills and Land Application Sites).

(xiv) Maintenance Activities—For vehicle maintenance activities performed on the plant site, the permittee shall use the applicable BMPs outlined in Part XI.P. of the permit (Storm Water Discharges Associated With Industrial Activity From Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities).

(xv) Material Storage Areas—The plan must describe measures that prevent or minimize contamination of storm water from material storage areas (including areas used for temporary storage of miscellaneous products, and construction materials stored in lay down areas). The facility may consider flat yard grades, runoff collection in graded swales or ditches, erosion protection measures at steep outfall sites (e.g., concrete chutes, riprap, stilling basins), covering lay down areas, storing the materials indoors, covering the material with a temporary covering made of polyethylene, polyurethane, polypropylene, or hypalon. Storm water runon may be minimized by constructing an enclosure or building a berm around the area.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under Part XI.O.3.a.(4) of this section, qualified facility personnel shall be identified to inspect the following areas on a monthly basis: coal handling areas, loading/unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained onsite. Such records are subject to review by the U.S. Environmental Protection Agency, and State, and local agencies with jurisdiction, and must be retained onsite a minimum of 1 year after coverage under this permit expires.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as goals of the pollution prevention plan, spill prevention and control, proper handling procedures for hazardous wastes, good housekeeping and material management practices, and storm water sampling techniques. The pollution prevention plan shall identify periodic dates for such training, but in all cases training must be held at least annually.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.O.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and, why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are

not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Construction Activities—For storm water discharges from construction activities which disturb greater than 5 acres, the permittee shall submit a Notice of Intent (NOI) to be covered under the NPDES General Permit for Storm Water Discharges From Construction Sites.

(j) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Part XI.O.3.a.(2)) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.O.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with Part XI.O.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.O.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations

Coal pile runoff is subject to the effluent guidelines described in Part VI.F. of this fact sheet. However, steam electric generating facilities must comply with the requirement of Part VI.F. immediately upon permit issuance. Steam electric generating facilities are not permitted to take 3 years to meet this requirement.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with steam electric power generating facilities must monitor their storm water discharges associate with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3). (sampling waiver), 5.a.(4). (representative discharge), and 5.a.(5).(alternative certification), steam electric power generating facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table O–1 below. Facilities must report in accordance with 5.b.(reporting). In addition to the parameters listed in Table O–1 (below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

TABLE O–1.—MONITORING REQUIREMENTS FOR STEAM ELECTRIC POWER GENERATING FACILITIES

Pollutants of concern	Cut-off concentration (mg/L)
Total Recoverable Copper	0.009
Total Recoverable Aluminum	0.75
Total Recoverable Arsenic	0.000018
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
Total Recoverable Manganese	0.05

(1) Monitoring Periods. Steam electric power generating facilities shall monitor samples collected during the sampling periods of; January to March, April to June, July to September, and October to December for the years specified in paragraph a (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated

with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (monitoring periods) due to adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table O–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has 2 or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (signatory requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with steam electric power generating facilities shall submit monitoring results, or a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived, obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results, or a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived, obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in VI.G. of the fact sheet to this permit.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above) steam electric power generating facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained on-site in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution, and probable

sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

P. Storm Water Discharges Associated With Industrial Activity From Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United States Postal Service Transportation Facilities

1. Discharges Covered Under This Section. Storm water discharges from ground transportation facilities and rail transportation facilities that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) and/or equipment cleaning operations are eligible for coverage under this section. The facilities covered by this section of today's proposed permit are commonly identified by standard Industrial Classification (SIC) codes 40, 41, 42, 43, and 5171 or any other facility with vehicle and equipment maintenance shops or cleaning operations.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions. Prohibition of Non-storm Water Discharges. Prohibited non-storm water discharges, including vehicle and equipment washwaters, are not authorized by this permit. The operators of such discharges must obtain coverage under a separate National Pollutant Discharge Elimination System (NPDES) permit if discharged to waters of the U.S. or through a municipal separate storm sewer system or comply with applicable industrial pretreatment requirements if discharged to a municipal sanitary sewer system.

3. Storm Water Pollution Prevention Plan Requirements

a. Deadlines for Plan Preparation and Compliance. There are no additional deadlines for plan preparation and compliance, other than those stated in Part IV.A.

b. Contents of the Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—A site map indicating the location of each point of discharge of storm water associated with industrial activity, an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries (with a prediction of the direction of flow), each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.P.3.b.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities: fueling stations, vehicle and equipment maintenance and/or cleaning areas, storage areas for vehicles and equipment awaiting maintenance, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas, storage areas, and all monitoring locations.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; dirt or gravel parking areas for storage of vehicles to be maintained; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) *Sampling Data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities associated with vehicle and equipment maintenance and equipment cleaning: fueling stations; maintenance shops; equipment or vehicle cleaning areas; paved dirt or gravel parking areas for vehicles to be maintained; loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., oil and grease, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) *Good Housekeeping*—All areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. The following areas must be specifically addressed:

(*i*) *Vehicle and Equipment Storage Areas*—The storage of vehicles and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility shall consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, installation of berming and diking of this area, use of absorbents, roofing or covering storage areas, cleaning pavement surface to remove oil and grease, or other equivalent methods.

(*ii*) *Fueling Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The facility shall consider covering the fueling area, using spill and overflow protection and cleanup equipment, minimizing runon/runoff of storm water to the fueling area, using dry cleanup methods, collecting the storm water runoff and providing treatment or recycling, or other equivalent measures.

(*iii*) *Material Storage Areas*—Storage units of all materials (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids) must be maintained in good condition, so as to prevent contamination of storm water, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility shall consider indoor storage of the materials, installation of berming and diking of the area, minimizing runon/runoff of storm water to the areas, using dry cleanup methods, collecting the storm water runoff and providing treatment, or other equivalent methods.

(*iv*) *Vehicle and Equipment Cleaning Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The facility shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all washwaters drain to the intended collection system (i.e., not the storm water drainage system unless NPDES permitted), collecting the storm water runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. The discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized by this permit and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

(*v*) *Vehicle and Equipment Maintenance Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The facility shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practices where the practices would result in the discharge of pollutants to storm water drainage systems, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, minimizing runon/runoff of storm water areas or other equivalent measures.

(*vi*) *Locomotive Sanding (loading sand for traction) Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from areas used for locomotive sanding. The facility shall consider covering sanding areas, minimizing storm water runon/runoff, appropriate sediment removal practices to minimize the offsite transport of sanding material by storm water, or other equivalent measures.

(*b*) *Preventive Maintenance*—A preventive maintenance program shall include timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins, drip pans, vehicle-mounted drip containment devices) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(*c*) *Spill Prevention and Response Procedures*—Areas where potential spills could contribute pollutants to storm water discharges, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a monthly basis. The following areas shall be included in all inspections: storage area for vehicles and equipment awaiting maintenance, fueling areas, vehicle and equipment maintenance areas (both indoors and outdoors), material storage areas, vehicle and equipment cleaning areas, and loading and unloading areas. Follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist should be considered by the facility.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place; at a minimum, training must be held at least semiannually (twice per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: summary of the facility's pollution prevention plan requirements; used oil management; spent solvent management; spill prevention, response and control; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit. Such certification may not be practical if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not practical, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part XI.P.3.b.(3)(iv) (Failure to Certify) of this permit.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) A copy of the NPDES permit issued for vehicle and equipment washwaters or, if an NPDES permit has not yet been issued, a copy of the pending application must be attached to or referenced in the plan. For facilities that discharge vehicle and equipment washwaters to the sanitary sewer system, the operator of the sanitary system and associated treatment plant must be notified. In such cases, a copy of the notification letter must be attached to the plan. If an industrial user permit is issued under a pretreatment program, a copy of that permit must be attached in the plan. In all cases, any permit conditions or pretreatment requirements must be considered in the plan. If the washwaters are handled in another manner (e.g., hauled offsite), the disposal method must be described and all pertinent documentation (e.g., frequency, volume, destination, etc.) must be attached to the plan.

(iv) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide for the implementation and maintenance of measures that the permittee determines to be reasonable and appropriate. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see XI.P.3.b.(2) (description of potential pollutant sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. If a facility determines that other management measures can attain the same water quality in the storm water discharges as an oil/water separator, the justification must be included in the plan.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct comprehensive site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential

pollutant sources identified in the plan in accordance with Part XI.P.3.b.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.P.3.b.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.P.3.b.(3)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements.

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

O. Storm Water Discharges Associated With Industrial Activity From Water Transportation Facilities That Have Vehicle Maintenance Shops and/or Equipment Cleaning Operations

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from water transportation facilities that have vehicle (vessel) maintenance shops and/or equipment cleaning operations. The water transportation industry includes facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters; marine cargo handling operations; ferry operations; towing and tugboat services; and marinas. These facilities are commonly identified by Standard Industrial Classification (SIC) code Major Group 44.

Storm water discharges from water transportation facilities that have vehicle (vessel) and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) and/or equipment cleaning operations.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and

pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Prohibited non-storm water discharges of wastewaters, such as bilge and ballast water, sanitary wastes, and cooling water originating from vessels, are not authorized by this permit. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system.

b. Authorized Non-storm Water Discharges. Unless more restrictive State or local regulations prohibit such releases, this permit authorizes the discharge of non-storm water from routine external vessel washdown occurring over a containment area on land where appropriate pollution prevention measures have been implemented to ensure that the discharge released contains no visible sheen of oil or grease, detergents or visible solids such as paint particles, barnacles, and algae. Appropriate pollution prevention measures may include the practice of using no detergents or additives in the pressure washing operations and having a filtering screen at the discharge point of the containment or bermed area to remove solids.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.Q.3.a.(2)(c) (Spills and Leaks) of this section have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling, engine maintenance and repair, vessel maintenance and repair, pressure washing, painting, sanding, blasting, welding, metal fabrication, loading/unloading areas, locations used for the treatment, storage or disposal of wastes; liquid storage tanks, liquid storage areas (i.e., paint, solvents, resins), and material storage areas (i.e., blasting media, aluminum, steel, scrap iron).

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities if applicable: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities (i.e., welding, metal fabricating); significant dust or particulate generating processes (i.e., abrasive blasting, sanding, painting); loading/unloading areas; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed, when applicable at a facility:

(i) Pressure Washing Area—When pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by an NPDES permit. The pollution prevention plan must describe the measures to collect or contain the discharge from the pressure washing area, detail the method for the removal of the visible solids, describe the method of disposal of the collected solids, and identify where the discharge will be released (i.e., the receiving

waterbody, storm sewer system, sanitary sewer system).

(ii) Blasting and Painting Areas—The facility must consider containing all blasting and painting activities to prevent abrasives, paint chips, and overspray from reaching the receiving water or the storm sewer system. The plan must describe measures taken at the facility to prevent or minimize the discharge of spent abrasive, paint chips, and paint into the receiving waterbody and storm sewer system. The facility may consider hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris. Where required, a schedule for cleaning storm systems to remove deposits of abrasive blasting debris and paint chips should be addressed within the plan. The plan should include any standard operating practices with regard to blasting and painting activities. Such included items may be the prohibition of performing uncontained blasting and painting over open water or blasting and painting during windy conditions which can render containment ineffective.

(iii) Material Storage Areas—All stored and containerized materials (fuels, paints, solvents, waste oil, antifreeze, batteries) must be stored in a protected, secure location away from drains and plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility must specify which materials are stored indoors and consider containment or enclosure for materials that are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the containment measures in place to prevent leaks and spills. The facility must consider implementing an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous materials. Those facilities where abrasive blasting is performed must specifically include a discussion on the storage and disposal of spent abrasive materials generated at the facility.

(iv) Engine Maintenance and Repair Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for engine maintenance and repair. The facility may consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(v) Material Handling Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from material handling operations and areas (i.e., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The facility may consider covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area, preferably indoors or under a shed; and minimizing runon of storm water to material handling areas. Where applicable, the plan must address the replacement or repair of leaking connections, valves, pipes, hoses, and soil chutes carrying wastewater from vessels.

(vi) Drydock Activities—The plan must address the routine maintenance and cleaning of the drydock to minimize the potential for pollutants in the storm water runoff. The plan must describe the procedures for cleaning the accessible areas of the drydock prior to flooding and final cleanup after the vessel is removed and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on the drydock must also be included within the plan. The facility should consider items such as sweeping rather than hosing off debris and spent blasting material from the accessible areas of the drydock prior to flooding and having absorbent materials and oil containment booms readily available to contain and cleanup any spills.

(vii) General Yard Area—The plan must include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc., must be routinely removed from the general yard area. The facility may consider such measures as providing covered trash receptacles in each yard, on each pier, and on board each vessel being repaired.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a monthly basis. The following areas shall be included in all inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but in all cases training must be held at least semiannually (twice per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: used oil management; spent solvent management; proper disposal of spent abrasives; proper disposal of vessel wastewaters, spill prevention and control; fueling procedures; general good housekeeping practices; proper painting and blasting procedures; and used battery management. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. The facility must consider posting instructions, easy to read descriptions or graphic depictions of BMPs, spill control/clean-up

equipment and emergency phone numbers in the work areas.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.Q.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge. Non-storm water discharges authorized under Part XI.Q.2.b. may be released independently of storm water discharges.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.Q.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity (pressure washing area, blasting and sanding areas, painting areas, material storage areas, engine maintenance and repair areas, material handling areas, and drydock area) shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.Q.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.Q.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.Q.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with water transportation facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Water transportation facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table Q–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table Q–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE Q–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Recoverable Aluminum	0.75
Total Recoverable Iron	0.3
Total Recoverable Lead	0.0337
Total Recoverable Zinc	0.065
Chemical Oxygen Demand	85
Total Suspended Solids	100

(1) Monitoring Periods. Water transportation facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table Q–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with water transportation facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of

Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), water transportation facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

R. Storm Water Discharges Associated With Industrial Activity From Ship and Boat Building or Repairing Yards

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from ship building and repairing and boat building and repairing.[6]

a. Eligibility. Storm water discharges from ship building and repair facilities and boat building and repair facilities under Standard Industrial Classification (SIC) code 373.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Prohibited non-storm water discharges of wastewaters, such as bilge and ballast water, pressure wash water, sanitary wastes, and cooling water originating from vessels, are not authorized by this permit. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the United States or through a municipal separate storm sewer system.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan

[6] According to the U.S. Coast Guard, a vessel 65 feet or greater in length is referred to as a ship, and a vessel smaller than 65 feet is a boat.

shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.R.3.a.(2)(c) (Spills and Leaks) of this section have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling, engine maintenance and repair, vessel maintenance and repair, pressure washing, painting, sanding, blasting, welding, metal fabrication, loading/unloading areas, locations used for the treatment, storage or disposal of wastes; liquid storage tanks, liquid storage areas (i.e., paint, solvents, resins), and material storage areas (i.e., blasting media, aluminum, steel, scrap iron).

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities if applicable: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities (i.e., welding, metal fabricating); significant dust or particulate generating processes (i.e., abrasive blasting, sanding, painting); loading/unloading areas; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed, when applicable at a facility:

(i) Pressure Washing Area—When pressure washing is used to remove marine growth from vessels, the discharge water must be permitted as a process wastewater by an NPDES permit.

(ii) Blasting and Painting Areas—The facility must consider containing all blasting and painting activities to prevent abrasives, paint chips, and overspray from reaching the receiving water or the storm sewer system. The plan must describe measures taken at the facility to prevent or minimize the discharge of spent abrasive, paint chips, and paint into the receiving waterbody and storm sewer system. The facility may consider hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris. Where required, a schedule for cleaning storm systems to remove deposits of abrasive blasting debris and paint chips should be addressed within the plan. The plan should include any standard operating practices with regard to blasting and painting activities. Such included items may be the prohibition of performing uncontained blasting and painting over open water or blasting and painting during windy conditions which can render containment ineffective.

(ii) Material Storage Areas—All stored and containerized materials (fuels, paints, solvents, waste oil, antifreeze, batteries) must be stored in a protected, secure location away from drains and plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility must specify which materials are stored indoors and consider containment or enclosure for materials that are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the containment measures in place to prevent leaks and spills. The facility must consider implementing an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous materials. Those facilities where abrasive blasting is performed must specifically include a discussion on the storage and disposal of spent abrasive materials generated at the facility.

(iv) Engine Maintenance and Repair Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for engine maintenance and repair. The facility must consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practice where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling.

(v) Material Handling Areas—The plan must describe measures that prevent or minimize contamination of

the storm water runoff from material handling operations and areas (i.e., fueling, paint & solvent mixing, disposal of process wastewater streams from vessels). The facility must consider covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area, preferably indoors or under a shed; and minimizing runon of storm water to material handling areas. Where applicable, the plan must address the replacement or repair of leaking connections, valves, pipes, hoses, and soil chutes carrying wastewater from vessels.

(vi) Drydock Activities—The plan must address the routine maintenance and cleaning of the drydock to minimize the potential for pollutants in the storm water runoff. The plan must describe the procedures for cleaning the accessible areas of the drydock prior to flooding and final cleanup after the vessel is removed and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on the drydock must also be included within the plan. The facility must consider items such as sweeping rather than hosing off debris and spent blasting material from the accessible areas of the drydock prior to flooding and having absorbent materials and oil containment booms readily available to contain and cleanup any spills.

(vii) General Yard Area—The plan must include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc., must be routinely removed from the general yard area. The facility must consider such measures as providing covered trash receptacles in each yard, on each pier, and on board each vessel being repaired.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a monthly basis. The following areas shall be included in all inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. The pollution prevention plan shall identify how often training will take place, but in all cases training must be held at least semiannually (twice per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: used oil management; spent solvent management; proper disposal of spent abrasives; proper disposal of vessel wastewaters, spill prevention and control; fueling procedures; general good housekeeping practices; proper painting and blasting procedures; and used battery management. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. The facility should consider posting easy to read descriptions or graphic depictions of BMPs and emergency phone numbers in the work areas.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.R.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate

tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.R.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity including, but not limited to, pressure washing area, blasting and sanding areas, painting areas, material storage areas, engine maintenance and repair areas, material handling areas, and drydock area, shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.R.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.R.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.R.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with ship and boat building and repair facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Ship and boat building and repair facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table R–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table R–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE R–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Recoverable Copper ...	.009
Total Recoverable Zinc	.065
Total Recoverable Iron	.3
Total Recoverable Lead	.0337
Total Recoverable Arsenic ...	.000018
Nitrate + Nitrite as N	0.68

(1) Monitoring Periods. Ship and boat building and repair facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table R–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with ship and boat building and repair facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), Ship and boat building and repair facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the

permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

S. Storm Water Discharges Associated With Industrial Activity From Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from airports, air terminals and flying fields generally classified under Standard Industrial Classification (SIC) code 45 which have vehicle maintenance shops, material handling facilities, equipment cleaning operations or airport deicing operations.

a. Eligibility. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing operations are addressed under this section.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Non-storm water discharges including aircraft, ground vehicle, runway and equipment washwaters, and dry weather discharges of deicing/anti-icing chemicals are not authorized by this permit. Operators of such discharges must obtain coverage under a separate National Pollutant Discharge Elimination System (NPDES) permit if discharged to waters of the U.S. or through a municipal separate storm sewer system.

3. Storm Water Pollution Prevention Plan Requirements. The permittee (Airport authority) shall ensure that storm water pollution prevention plans are developed and implemented for areas of the facility occupied by tenants of the airport who conduct operations which result in storm water discharges associated with industrial activity. For the purposes of today's permit, tenants of the airport facility includes airline companies, fixed based operators and other parties which have contracts with the airport authority to conduct business operations on airport property which result in storm water discharges associated with industrial activity as described in paragraph 1 of this section. Plans developed for areas occupied by tenants shall include the requirements specified in this section, and be integrated with the storm water pollution prevention plan for the entire airport. Plan should be developed in accordance with Part IV.A.

a. Contents of Plan. Each plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals as member(s) of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility management in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map indicating an outline of the drainage area of each storm water outfall within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under paragraph XI.S.3.a.(2)(c) (Spills and Leaks) of this section have occurred, and the locations of the following activities where such activities are exposed to precipitation: aircraft and runway deicing/anti-icing operations; fueling stations; aircraft, ground vehicle and equipment maintenance and/or cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance; loading/unloading areas; locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(iii) The site map developed for the entire airport shall indicate the location of each tenant of the facility that conducts industrial activities as described in Part XI.S.1.a., and incorporate information from the tenants site map (including a description of industrial activities,

significant materials exposed, and existing management practices).

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment of storm water runoff.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(*d*) *Sampling Data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(*e*) *Risk Identification and Summary of Potential Pollutant Sources*—A narrative description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing/anti-icing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps); outdoor storage activities; loading and unloading operations; and onsite waste disposal. The description shall specifically list any significant potential source of pollutants at the facility and for each potential source, any pollutant or pollutant parameter [e.g., biochemical oxygen demand (BOD_5), oil and grease, etc.] of concern shall be identified.

Facilities which conduct deicing operations shall maintain a record of the types [including the Material Safety Data Sheets (MSDS)] and monthly quantities of deicing/anti-icing chemicals used by all parties conducting deicing operations at the airport facility.

(*3*) *Measures and Controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The priority in selecting controls shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(*a*) *Good Housekeeping*—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(*i*) *Aircraft, Ground Vehicle and Equipment Maintenance Areas*—The permittee should ensure the maintenance of equipment is conducted in designated areas only and clearly identify these areas on the ground and delineate them on the site map. The plan must describe measures that prevent or minimize the contamination of the storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). Management practices such as performing maintenance activities indoors, maintaining an organized inventory of materials used in the maintenance areas, draining all parts of fluids prior to disposal, preventing the practice of hosing down the apron or hangar floor, using dry cleanup methods, and/or collecting the storm water runoff from the maintenance area and providing treatment or recycling should be considered.

(*ii*) *Aircraft, Ground Vehicle and Equipment Cleaning Areas*—The permittee should ensure that cleaning of equipment is conducted in designated areas only and clearly identify these areas on the ground and delineate them on the site map. The plan must describe measures that prevent or minimize the contamination of the storm water runoff from all areas used for aircraft, ground vehicle and equipment cleaning. Management practices such as performing cleaning operations indoors, and/or collecting the storm water runoff from the cleaning area and providing treatment or recycling should be considered.

(*iii*) *Aircraft, Ground Vehicle and Equipment Storage Areas*—The storage of aircraft, ground vehicles and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize the contamination of the storm water runoff from these areas. Management practices such as indoor storage of aircraft and ground vehicles, the use of drip pans for the collection of fluid leaks, and perimeter drains, dikes or berms surrounding storage areas should be considered.

(*iv*) *Material Storage Areas*—Storage units of all materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) must be maintained in good condition, so as to prevent or minimize contamination of storm water, and plainly labeled (e.g., "used oil," "Contaminated Jet A," etc.). The plan must describe measures that prevent or minimize contamination of the storm water runoff from storage areas. Management practices such as indoor storage of materials, centralized storage areas for waste materials, and/or installation of berming and diking around storage areas should be considered for implementation.

(*v*) *Airport Fuel System and Fueling Areas*—The plan must describe measures that prevent or minimize the discharge of fuels to the storm sewer resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Where the discharge of fuels into the storm sewer cannot be prevented, the plan shall indicate measures that will be employed to prevent or minimize the discharge of the contaminated runoff into receiving surface waters. Management practices such as implementing spill and overflow practices (e.g., placing sorptive materials beneath aircraft during fueling operations), using dry cleanup methods, and/or collecting the storm water runoff should be considered.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, removing debris from catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. The plan shall describe material handling procedures, storage requirements, and consider the use of equipment such as diversion valves. Procedures for cleaning up spills shall be identified in

the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Source Reduction—Facilities which conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations shall evaluate present operating procedures to consider alternative practices to reduce the overall amount of deicing/anti-icing chemicals used and/or lessen the environmental impact of the pollutant source.

(i) With regard to runway deicing/anti-icing operations, facilities, at a minimum, shall evaluate: present application rates to ensure against excessive over application; metered application of deicing/anti-icing chemical; pre-wetting dry chemical constituents prior to application; installation of runway ice detection systems; implementing anti-icing operations as a preventive measure against ice buildup; and the use of substitute deicing compounds such as potassium acetate in lieu of ethylene glycol and/or urea.

(ii) In considering alternative management practices for aircraft deicing operations, facilities should evaluate current application rates and practices to ensure against excessive over application, and pretreating aircraft with hot water prior to the application of a deicing chemical, thus reducing the overall amount of chemical used per operation.

Source reduction measures that the facility determines to be reasonable and appropriate shall be implemented and maintained. The plan shall provide a narrative explanation of the options considered and the reasoning for whether or not to implement them.

(e) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which prevent or reduce source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.S.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered. Appropriate measures may include: vegetative swales, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. Measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained.

(i) Facilities which conduct aircraft and/or runway deicing/anti-icing operations shall also provide a narrative consideration of management practices to control or manage contaminated runoff from areas where deicing/anti-icing operations occur to reduce the amount of pollutants being discharged from the site. Structural controls such as establishing a centralized aircraft deicing facility, and/or collection of contaminated runoff for treatment or recycling should be considered. Collection and treatment alternatives include, but are not limited to, retention basins, detention basins with metered controlled release, Underground Storage Tanks (USTs) and/or disposal to Publicly Owned Treatment Works (POTW) by way of sanitary sewer or hauling tankers. Runoff management controls that the facility determines to be reasonable and appropriate shall be implemented and maintained. The plan should consider the recovery of deicing/anti-icing materials when these materials are applied during non-precipitation events. The plan shall provide a narrative explanation of the controls considered and the reasoning for whether or not to implement them.

(f) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.S.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility specified in the plan. The inspection frequency shall be specified in the plan, but at a minimum be conducted once per week during deicing/anti-icing application periods for areas where deicing/anti-icing operations are being conducted. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the pollution prevention team is encouraged.

(g) Pollution Prevention Training—Pollution prevention training programs shall be developed to inform airport management and tenant personnel responsible for implementing activities identified in the storm water pollution prevention plan of the components and goals of the plan. Training should address topics such as spill response, good housekeeping, aircraft and runway deicing/anti-icing procedures, and material management practices. The pollution prevention plan shall identify periodic dates for such training.

(h) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records shall be incorporated into the plan.

(i) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge points have been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.S.3.a.(3)(iii) (below).

(ii) Except for flows from fire fighting activities, other sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting a

notice of intent to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(j) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations during periods of deicing/anti-icing operations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.S.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.S.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.S.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(f), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. During the period beginning on the effective date and lasting through the expiration date of this permit, facilities which conduct aircraft and/or runway deicing/anti-icing operations:

(1) Shall prepare estimates for annual pollutant loadings resulting from discharges of spent deicing chemicals from the facility. The loading estimates shall reflect the amounts of deicing chemicals discharged to separate storm sewer systems or surface waters, prior to and after implementation of the facility's storm water pollution prevention plan. Such estimates shall be reviewed by a Registered Professional Engineer, and certified by such engineer. By means of the certification, the engineer, having examined the facility's, deicing procedures, and proposed control measures described in the storm water pollution prevention plan, shall attest that the loading estimates have been prepared in accordance with good engineering practices. Certified loading estimates are to be retained at the airport facility and attached to the storm water pollution prevention plan.

b. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], airports that use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis shall monitor outfalls from the facility that collect runoff from areas where deicing/anti-icing activities occur 4 times during months of deicing (November to March), except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Airports which are subject to these monitoring requirements must sample their storm water discharges for the pollutants of concern listed in Table S–1 below. Such facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table S–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE S–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration
Biochemical Oxygen Demand (BOD_5).	9 mg/L.
Chemical Oxygen Demand (COD).	65 mg/L.
Total Kjeldahl Nitrogen (TKN).	1.50 mg/L.
pH	6.5 to 9 s.u.

For the purposes of today's permit, the "average annual" usage rate of deicing/anti-icing chemicals is determined by averaging the amounts of deicing/anti-icing chemicals used at the facility in the 3 previous calendar years.

(1) Monitoring Periods. Airports that use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis shall monitor outfalls from the facility that collect runoff from areas where deicing/anti-icing activities occur four times per year during periods when deicing/anti-icing activities occur (November to March), in the years specified in paragraph n. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in

magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table S–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

c. Reporting. Airports shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

T. Storm Water Discharges Associated With Industrial Activity From Treatment Works

1. Discharges Covered Under This Section

a. Eligibility. This permit covers all existing point source discharges of storm water from treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of sewage sludge that are located within the confines of the facility with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under 40 CFR Part 403. When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Prohibited non-storm water discharges including sanitary and industrial wastewater, and equipment and vehicle washwaters are not authorized by this permit. The operators of such discharges must obtain coverage under a separate NPDES permit if discharged to waters of the U.S. or through a municipal separate storm sewer system.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of the Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage—A site map indicating the location of each point of discharge of storm water associated with industrial activity, an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries (with a prediction of the direction of flow), each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part III.B. (Spills and Leaks) of this permit have occurred, and the locations of the following activities: fueling areas; vehicle and equipment maintenance and/or cleaning areas; locations used for treatment, storage and disposal areas for wastes, liquid storage tanks, processing areas and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides; and loading/unloading areas.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities associated with treatment works: access roads/rail lines; loading and unloading operations; outdoor storage activities; material handling sites; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., acid, bases, and solvents, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—All areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.

(d) Inspections—In addition to the comprehensive site evaluation required under Part XI.T.3.a.(4) of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a monthly basis. The following areas shall be included in all inspections: access roads/rail lines, equipment storage and maintenance areas (both indoor and outdoor areas); fueling; material handling areas, residual treatment, storage, and disposal areas; and wastewater treatment areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the facility is encouraged.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but in all cases training must be held at least semiannually (twice per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and control; fueling procedures; general good housekeeping practices; proper procedures for using fertilizers, herbicides and pesticides.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be practical if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not practical, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part XI.T.3.a.(3)(g)(iv) (Failure to Certify) of this permit.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) A copy of all the current NPDES permit issued for wastewater, industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending application must be attached to the plan. For facilities that discharge vehicle and equipment washwaters to the sanitary sewer system, the operator of the sanitary system and associated treatment plant must be notified. In such cases, a copy of the notification letter must be attached to the plan. If an industrial user permit is issued under a pretreatment program, a copy of that permit must be attached in the plan. In all cases, any permit conditions must be considered in the plan. If the washwaters are handled in another manner (e.g., hauled offsite), the disposal method must be described and all pertinent documentation (e.g., frequency, volume, destination, etc.) must be attached to the plan.

(iv) Failure to Certify. Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [insert date 270 days after permit issuance] or, for facilities that begin to discharge storm water associated with industrial activity after [insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notifications shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see Part XI.T.3.a.(2) (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. If a facility determines that other management measures can attain the same water quality in the storm water discharges as an oil/water separator, the justification must be included in the plan.

(4) Comprehensive Site Compliance Evaluation—Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.T.3.a.(2) (Description of Potential Pollutant

Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.T.3.a.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.T.3.a.(4)(b) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no numeric effluent limitations beyond those in Part V.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], treatment works must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Treatment works are required to monitor their storm water discharges for the pollutants of concern listed in Table T–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table T–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE T–1.— MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Phosphorus	0.33
Nitrate + Nitrite Nitrogen	0.68
Ammonia	0.0925
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Manganese	0.05
Total Recoverable Zinc	0.065

(1) Monitoring Periods. Treatment works shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table T–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law,

signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.A. of this permit.

b. Reporting. Permittees with treatment works shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results (or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), treatment works with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

U. Storm Water Discharges Associated With Industrial Activity From Food and Kindred Products Facilities

1. Discharges Covered Under This Section. This section covers all storm water discharges from food and kindred products processing facilities commonly identified by Standard Industrial Classification (SIC) code 20 (including meat products; dairy products; canned, frozen and preserved fruits, vegetables, and food specialties; grain mill products; bakery products; sugar and confectionery products; fats and oils; beverages; and miscellaneous food preparations and kindred products) and SIC Code 21 (tobacco products manufacturing), except for storm water discharges identified under paragraph I.B.3. where industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residential treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; and storage areas for raw material and intermediate and finished products are exposed to storm water and areas where industrial activity has taken place in the past and significant materials remain. For the purposes of this paragraph, material handling activities include the storage, loading, and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for

industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges.

(*1*) Discharges of non-storm water, including boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing/clean-out operations, to waters of the United States, or through municipal separate storm sewer systems, are not authorized by this permit. The operators of such discharges must obtain coverage under a separate NPDES wastewater discharge permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(*1*) *Pollution Prevention Team.* Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(*2*) *Description of Potential Pollutant Sources.* Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(*a*) *Drainage*—A site map indicating the pattern of storm water drainage, existing structural control measures to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, and locations where major spills or leaks identified under Part XI.U.3.a.(2)(c) (Spills and Leaks) of this permit have occurred since 3 years prior to the effective date of this permit. The map must also indicate the locations of all industrial activities that are exposed to precipitation, including, but not limited to: loading/unloading areas; vehicle fueling; vehicle and equipment maintenance and/or cleaning areas; waste treatment, storage and disposal locations; liquid storage tanks; vents and stacks from cooking, drying, and similar operations, dry product vacuum transfer lines; animal holding pens; spoiled product and broken product container storage areas; significant dust or particulate generating areas; and any other processing and storage areas exposed to storm water. Flows with a significant potential for causing erosion shall also be identified. In addition, the site map must identify monitoring locations.

(*b*) *Inventory of Exposed Materials*—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(*c*) *Spills and Leaks*—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(*d*) *Sampling Data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(*e*) *Summary of Potential Pollutant Sources*—The description of potential pollutant sources culminates in a narrative assessment of the risk potential that the industrial activities, materials, and physical features of the site, as identified in XI.U.3.a.(2)(a) (drainage), pose to storm water quality. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, oil and grease, etc.) of concern shall be identified.

In addition to food and kindred products processing-related industrial activities, the plan must also describe application/storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides, and others) used on plant grounds, including a description of pest control application and chemical storage practices.

(*3*) *Measures and Controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(*a*) *Good Housekeeping*—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner.

(*b*) *Preventive Maintenance*—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(*c*) *Spill Prevention and Response Procedures*—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Areas that must be identified should include loading/unloading stations, outdoor storage areas, and waste management areas exposed to storm water. Where

appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—As part of the comprehensive site evaluation required under Part XI.U.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at least once each year. At a minimum, the following areas, where the potential for exposure to storm water exists, must be inspected on a regularly scheduled basis: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. Based on the results of the inspection, the description of potential pollutant sources and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, material management practices, unloading/loading practices, outdoor storage areas, waste management practices, pest control, and improper connections to the storm sewer. At a minimum, this training must be provided annually. The pollution prevention plan shall identify frequencies and approximate dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. Ineffective BMPs must be recorded and the date of their corrective actions noted in the plan.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part XI.U.3.a.(3)(g)(iv) (Failure to Certify) of this permit.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) If the facility discharges wastewater, other than storm water via an existing NPDES permit, a copy of the NPDES permit authorizing the discharge must be attached to the plan. Similarly, if the facility submitted an application for an NPDES permit for non-storm water discharges, but has not yet received that permit, a copy of the permit application must be attached. Upon issuance or reissuance of an NPDES permit, the facility must modify its plan to include a copy of that permit. For facilities that discharge wastewater, other than solely domestic wastewater, to a Publicly Owned Treatment Works (POTW), the facility must notify the POTW of its discharge. Proof of this notification should be attached to the plan in the form of either: (1) a copy of the permit issued by the treatment plant to the facility, or (2) a copy of a notification letter to the POTW. Notification should identify, in general, the types of wastewater discharged to the POTW, including any storm water discharges. Whether or not the POTW issues a permit to the facility, storm water discharges to the POTW must be considered in the plan.

(iv) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Part XI.U.3.a.(2) (Description of Potential Pollutant Sources) of this

permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Where compliance evaluation schedules overlap with inspections required under XI.U.3.a.(3)(d) of this section, the compliance evaluation may be conducted in place of one such inspection. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.U.3.a.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.U.3.a.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.U.3.a.(4)(d) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) The storm water pollution prevention plan must describe the scope and content of the comprehensive site inspections that qualified personnel will conduct to (1) confirm the accuracy of the description of potential sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of the permit. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team, as identified in Part XI.U.3.a.(1) (Pollution Prevention Team). Inspection reports must be retained for at least 3 years after the date that the permit expires.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with food and kindred products facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Food and kindred products facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table U–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table U–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE U–1.—MONITORING REQUIREMENTS

Pollutants of concern	Cut-off concentration (mg/L)
Five-Day Biochemical Oxygen Demand (BOD_5)	9
Ammonia	0.093
Total Kjeldahl Nitrogen (TKN)	1.5
Total Phosphorus	0.33
Total Recoverable Copper	0.009
Total Recoverable Manganese	0.05
Total Recoverable Iron	0.3
Total Recoverable Zinc	0.065

(1) Monitoring Periods. Food and kindred products facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver.

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms

etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table U–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity, that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with part VI.C. of this permit.

b. Reporting. Permittees with food and kindred products facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in part VI.G. of the fact sheet to this permit.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above) food and kindred products, facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of a grab sample collected within the first 30 minutes [or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge [i.e., runoff or snow melt), visual quality of the storm water discharge [including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(a) When a discharger is unable to collect samples over the course of the

monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

V. Storm Water Discharges Associated With Industrial Activity From Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from the following activities: Textile Mill Products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel; the integrated manufacturing of knit apparel and other finished articles of yarn; the manufacturing of felt goods (wool), lace goods, nonwoven fabrics, miscellaneous textiles, and other apparel products.

The following standard industrial classification (SIC) codes from the 1987 manual, are typical of the types of industrial activities included for coverage under this section: 2211, broadwoven fabric mills, cotton; 2221, broadwoven fabric Mills, Manmade fibers and silk; 2231, broadwoven fabric mills, wool; 2241, narrow fabric mills; 2251, women's hosiery, except socks; 2252, hosiery; 2257, weft knit fabric mills; 2258, lace and warp knit fabric mills; 2259, knitting mills; 2260, textile finishing, except wool; 2261, finishing plants, cotton; 2262, finishing plant, man-made ; 2269, finishing plants; 2273, carpets and rugs; 2281, yarn spinning mills; 2282, throwing and winding mills; 2283, thread mills; 2294, textile goods; 2295, coated fabrics, not rubberized; 2297, nonwoven fabrics; 2299, textile goods; curtains and draperies; and SIC Group 23.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges.

(1) Prohibited non-storm water includes, but is not limited to discharges of wastewater, such as wastewater as a result of wet processing, wastewaters resulting from any processes relating to the production process, reused or recycled water, and waters used in cooling towers. Operators of such discharges to waters of the United States, must obtain coverage under a separate NPDES permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage.

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.V.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks or silos, bulk storage areas that may exist, processing areas and storage areas, fueling stations, vehicle and equipment maintenance and/or cleaning areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) *Spills and Leaks*—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) *Sampling Data*—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) *Risk Identification and Summary of Potential Pollutant Sources*—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; onsite waste disposal practices; industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing, bonding carbonizing, carding, cut and sew operations, desizing, drawing, dyeing flocking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing). The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) *Measures and Controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) *Good Housekeeping*—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed, when applicable at the facility:

(i) *Material Storage Areas*—All stored and containerized materials (fuels, petroleum products, solvents, dyes, etc.) must be stored in a protected area, away from drains and clearly labeled. The plan must describe measures that prevent or minimize contamination of storm water runoff from such storage areas. The facility should specify which materials are stored indoors and must provide a description of the containment area or enclosure for those materials which are stored outdoors. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map with a description of the appropriated containment measures in place to prevent leaks and spills. The facility may consider an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous substances. In the case of storage of empty chemical drums and containers, facilities should employ practices which ensure that barrels are clean and residuals are not subject to contact with storm water, such practices may include triple-rinsing containers. The discharge waters from such washings must be collected and disposed of properly.

(ii) *Material Handling Area*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from materials handling operations and areas. The facility may consider the use of spill and overflow protection; covering fueling areas; covering and enclosing areas where the transfer of materials may occur. Where applicable, the plan must address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals, dyes, or wastewater.

(iii) *Fueling Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The facility may consider covering the fueling area, using spill and overflow protection, minimizing runon of storm water to the fueling area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling.

(iv) *Above Ground Storage Tank Areas*—The plan must describe measures that prevent or minimize contamination of the storm water runoff from above ground storage tank areas. The facility must consider storage tanks and their associated piping and valves. The facility may consider regular cleanup of these areas, preparation of a spill prevention control and countermeasure program, provide spill and overflow protection, minimizing runon of storm water from adjacent areas, restrict access to the area, insertion of filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use of dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.

(b) *Preventive Maintenance*—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, sediment traps, catch basins, infiltration devices, ponds) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) *Spill Prevention and Response Procedures*—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) *Inspections*—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. Inspection intervals are to occur on a monthly basis. Inspections of this nature shall include, but not be limited to, the following areas: all containment and storage areas, transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, all structural and nonstructural management practices. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) *Employee Training*—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training to take place at least semiannually. Employee

training must, at a minimum address the following areas when applicable to a facility: use of reused/recycled waters; solvents management; proper disposal of dyes; proper disposal of petroleum products and spent lubricants; spill prevention and control; fueling procedures; and general good housekeeping practices. Employees, independent contractors, and customers must be informed about BMPs and be required to perform in accordance with these practices. Copies of BMPs and any specific management plans, including emergency phone numbers, shall be posted in the work areas.

(*f*) *Recordkeeping and Internal Reporting Procedures*—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(*g*) *Non-storm Water Discharges*

(*i*) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.V.3.a.(3)(g)(iii) (below).

(*ii*) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.V.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity (storage tank areas, waste disposal and storage areas, dumpsters and open containers stored outside, materials storage areas, engine maintenance and repair areas, material handling areas, and loading dock areas) shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.V.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.V.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.V.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections

required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and an explanation in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

W. Storm Water Discharges Associated With Industrial Activity From Wood and Metal Furniture and Fixture Manufacturing Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges associated with industrial activities from facilities involved in the manufacturing of:

- Wood Kitchen Cabinets (SIC Code 2434)
- Household Furniture (SIC Code 251)
- Office Furniture (SIC Code 252)
- Public Buildings and Related Furniture (SIC Code 253)
- Partitions, Shelving, Lockers, and Office and Store Fixtures (SIC Code 254)
- Miscellaneous Furniture and Fixtures (SIC Code 259).

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. This section does not cover any discharge subject to process wastewater effluent limitation guidelines, including storm water that combines with process wastewater.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.W.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading and unloading areas; material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed; access roads; and rail spurs.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste treatment, storage, or disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect: the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems, and containment structures; visual inspections of vegetative BMPs to determine if soil erosion has occurred; and visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated storm water. Visual inspections shall be conducted in each of the following periods: December to February (*storm water runoff or snow melt*); March to May (*storm water runoff*); June to August (*storm water runoff*); September to November (*storm water runoff or snow melt*). Examinations shall be conducted within the first 30 minutes of when the runoff begins discharging. The visual inspections of BMPs and loading/unloading areas must be made at least once in each designated period during daylight hours unless there is insufficient rainfall or snow-melt to produce a runoff event. Information must be maintained onsite and include the examination date and time and the name of personnel conducting the visual inspection. The pollution prevention plan must be updated based on the results of each inspection. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), BMP inspection and maintenance activities, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under

this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. Ineffective BMPs must be reported and the date of their corrective action noted.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.W.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.W.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate semiannual intervals. The comprehensive site evaluation must be conducted during the March to May and September to November reporting periods. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity including, but not limited to, coal piles, ash disposal areas, loading/unloading operations, and waste treatment, storage, or disposal locations shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.W.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.W.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.W.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under XI.W.3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements.

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at

least once in each designated period (described in (a), below) during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g. low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)] shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

X. Storm Water Discharges Associated With Industrial Activity From Printing and Publishing Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges associated with industrial activity from facilities commonly identified by the following Standard Industrial Classification (SIC) codes:

- Book Printing (SIC Code 2732);
- Commercial Printing, Lithographic (SIC Code 2752);
- Commercial Printing, Gravure (SIC Code 2754);
- Commercial Printing, Not Elsewhere Classified (SIC Code 2759);
- Platemaking and Related Services (SIC Code 2796)

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions. There are no additional special conditions beyond those found in Part III. of today's permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.X.3.a.(2)(c) (Spills and Leaks) of this

section have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas. Above ground storage tanks, drums, and barrels permanently stored outside must be delineated on the site map.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities associated with printing, publishing and allied facilities: loading and unloading operations; outdoor storage activities; significant dust or particulate generating processes; and onsite waste disposal practices (i.e., blanket wash). The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., oil and grease, scrap metal, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. Areas where good housekeeping should be implemented include:

(i) Material Storage Areas—All stored and containerized materials (skids, pallets, solvents, bulk inks, and hazardous waste, empty drums, portable/mobile containers of plant debris, wood crates, steel racks, fuel oil, etc.) should be stored in a protected area, away from drains and properly labeled. The plan should describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility should specify which materials are stored indoors and must provide a description of the containment area or enclosure for those materials which are stored outdoors. The facility may consider an inventory control plan to prevent excessive purchasing, storage, and handling of potentially hazardous substances. The facility may consider indoor storage of the materials and/or installation of berming and diking of the [illegible].

(ii) Material Handling Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from materials handling operations and areas (i.e., blanket wash, mixing solvents, loading/unloading materials). The facility may consider the use of spill and overflow protection; covering fuel areas; covering and enclosing areas where the transfer of materials may occur. Where applicable, the plan must address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals, or wastewater.

(iii) Fueling Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from fueling areas. The facility may consider covering the fueling area, using spill and overflow protection, minimizing runon of storm water to the fueling area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling.

(iv) Above Ground Storage Tank Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from above ground storage tanks and their associated piping and valves. The facility may consider regular cleanup of these areas, preparation of a spill prevention control and countermeasure program, provide spill and overflow protection, minimizing runon of storm water from adjacent facilities and properties, restrict access to the area, insertion of filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use of dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, vegetative swales, secondary containment, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary

equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on an annual basis. The following areas shall be included in, but not limited to, all inspections: all containment and material storage areas, fueling areas, loading and unloading areas, equipment cleaning areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. The pollution prevention plan shall identify how often training will take place, but in all cases, training should be provided annually. Employee training must, at a minimum, address the following areas when applicable to a facility: spent solvent management; spill prevention and control; used oil management; fueling procedures; and general good housekeeping practices. The pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.X.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.X.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity (including, but not limited to, material handling areas, material storage areas, waste disposal and storage areas, loading/unloading areas) shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.X.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.X.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the

implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.X.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of a grab sample collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

Y. Storm Water Discharges Associated With Industrial Activity From Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to all storm water discharges associated with industrial activity from facilities in major SIC groups 30 and 39 (except SIC 391 Jewelry, Silverware, and Plated Ware). Major group 30 includes rubber and miscellaneous plastic products manufacturing facilities. Major group 39 includes miscellaneous manufacturing industries. This section does not apply to storm water discharges from co-located facilities, such as vehicle maintenance areas which are addressed in a separate section of this permit.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Other than as provided in Part III.A. of this permit, non-storm water discharges are not authorized by this section.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall

address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. All rubber manufacturers shall in particular review the use of zinc at their facilities and the possible pathways through which zinc may be discharged in storm water runoff. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.Y.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. Facilities subject to EPCRA Section 313 should note that the special requirements of Part IV.E. of this permit also apply to their facilities. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.Y.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been

tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.Y.3.a.(3)(g)(iii) (below).

(II) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.Y.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(i) Special Requirements for All Rubber Manufacturers—All rubber manufacturing facilities shall include specific measures and controls to minimize the discharge of zinc in their storm water discharges. The following possible sources of zinc shall be reviewed and the accompanying BMPs shall be included as appropriate in the storm water pollution prevention plan:

(i) Inadequate Housekeeping—All permittees shall review the handling and storage of zinc bags at their facilities and consider the following BMPs for the pollution prevention plan: employee training regarding the handling and storage of zinc bags, indoor storage of zinc bags, thorough cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

(ii) Zinc in Dumpsters—The following BMPs shall be considered to reduce discharges of zinc from dumpsters: providing a cover for the dumpster; move the dumpster to an indoors location; or provide a lining for the dumpster.

(iii) Malfunctioning Dust Collectors or Baghouses—Permittees shall review dust collectors and baghouses as possible sources in zinc in storm water runoff. Improperly operating dust collectors or baghouses shall be replaced or repaired as appropriate. The pollution prevention plan shall also provide for regular maintenance of these facilities.

(iv) Grinding Operations—Permittees shall review dust generation from rubber grinding operations at their facility and, as appropriate, install a dust collection system.

(v) Zinc Stearate Coating Operations—Permittees shall include in the pollution prevention plan appropriate measures to prevent and/or clean up drips or spills of zinc stearate slurry which may be released to the storm drain. Alternate compounds to zinc stearate shall also be considered.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.Y.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.Y.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water

pollution prevention plan, and actions taken in accordance with paragraph XI.Y.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(e) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

Z. Storm Water Discharges Associated With Industrial Activity From Leather Tanning and Finishing Facilities

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from the following activities: leather tanning, currying and finishing, facilities commonly identified by Standard Industrial Classification (SIC) code 3111. Discharges from facilities which make fertilizer solely from leather scraps and leather dust are also covered under this section. When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

There are no special conditions for this section beyond those in Part III. of this permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may

result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources or, during periods of dry weather, result in dry weather flows. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies (including wetlands), locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.Z.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, material storage (including tanks or other vessels used for liquid or waste storage), processing and storage areas for activities associated with beamhouse, tanyard, retan-wet finishing and dry finishing operations, and haul roads, access roads and rail spurs. The site map must also identify monitoring locations.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of a chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Significant spills include but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of the Clean Water Act (CWA) (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of potential pollutant sources including but not limited to the following activities: loading and unloading operations; outdoor storage activities, including but not limited to: temporary or permanent storage of fresh and brine cured hides, chemical drums, bags, containers and above ground tanks, leather dust, scraps, trimmings and shavings, spent solvents, extraneous hide substances and hair, and empty chemical containers and bags; floor sweepings and washings; refuse and waste piles and sludge; outdoor manufacturing or processing activities; significant dust or particulate generating processes including buffing; vehicle maintenance, washing and fueling and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, total suspended solids, chromium, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The following areas must be specifically addressed:

(i) Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products—Pallets and/or bales of raw, semiprocessed or finished tannery by-products (e.g., splits, trimmings, shavings, etc.) should be stored indoors or protected by polyethylene wrapping, tarpaulins, roofed storage area or other suitable means. Materials should be placed on an impermeable surface, the area should be enclosed or bermed or other equivalent measures should be employed to prevent runon and runoff of storm water.

(ii) Material Storage Areas—Label storage units of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials). Maintain such containers and units in good condition. Describe measures that prevent or minimize contact with storm water. The facility must consider indoor storage, installation of berming and diking around the area, and/or other equivalent measures to prevent runon and runoff of storm water.

Buffing/Shaving Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff with leather dust from buffing/shaving areas. The facility may consider dust collection enclosures, preventive inspection/maintenance programs or other appropriate preventive measures.

(iv) Receiving, Unloading, and Storage Areas—The plan must describe measures that prevent or minimize contamination of the storm water runoff from receiving, unloading, and storage areas. Exposed receiving, unloading and storage areas for hides and chemical supplies should be protected by a

suitable cover, diversion of drainage to the process sewer, grade berming or curbing area to prevent runon of storm water or other appropriate preventive measures. Materials must be plainly labelled and maintained in good condition.

(v) Outdoor Storage of Contaminated Equipment—The plan must describe measures that minimize contact of storm water with contaminated equipment. Equipment should be protected by suitable cover, diversion of drainage to the process sewer, thorough cleaning prior to storage or other appropriate preventive measures.

(vi) Waste Management—The plan must describe measures that prevent contamination of the storm water runoff from waste storage areas. The facility may consider inspection/maintenance programs for leaking containers or spills, covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulins or polyethylene, and minimizing storm water runon by enclosing the area or building berms around the area.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at least on a quarterly basis. The following areas shall be included in all inspections: leather processing areas, storage areas for chemicals, including but not limited to above ground tanks, fueling areas, vehicle and equipment maintenance areas, material storage areas, loading and unloading areas, waste management areas and other potential sources of pollution for evidence of actual or potential discharges of contaminated storm water. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections and that the pollution prevention plan is appropriately modified. Records of inspections shall be maintained as part of the pollution prevention plan.

Qualified personnel are required to conduct quarterly visual inspections of all Best Management Practices (BMPs). The inspections shall include an assessment of the effectiveness and need for maintenance of storm water roofing and covers, dikes and curbs, discharge diversions, sediment control and collection systems and all other BMPs.

Quarterly visual inspections must be made at least once in each of the following designated periods during daylight hours. December to February (storm water runoff or snow melt), March to May (storm water runoff), June to August (storm water runoff), and September to November (snow melt runoff). Records shall be maintained as part of the pollution prevention plan.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. The pollution prevention plan shall identify how often training will take place, but in all cases, training must be held at least annually. Employee training must, at a minimum, address the following areas when applicable to a facility: general good housekeeping practices, spill prevention and control, waste management, inspections, preventive maintenance, detection of non-storm water discharges and other areas.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as leaks, spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. The plan must address spills, monitoring, and BMP inspection and maintenance activities. BMPs which were ineffective must be reported and the date of their corrective action recorded. Employees must report incidents of leaking fluids to facility management and these reports must be incorporated into the plan.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.Z.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not

feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.Z.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. In addition, the permittee must describe the storm water pollutant source area or activity (e.g., storage areas, loading and unloading areas, above ground storage of chemicals) to be controlled by each storm water management practice.

The plan must consider management practices, such as berms for uncovered storage areas, uncovered loading and unloading areas, above ground liquid storage and waste management areas. The installation of detention ponds must also be considered.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.Z.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.Z.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.Z.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) The storm water pollution prevention plan must describe the scope and content of comprehensive site inspections that qualified personnel will conduct to 1) confirm the accuracy of the description of potential pollution sources contained in the plan, 2) determine the effectiveness of the plan, and 3) assess compliance with the terms and conditions of the permit. Comprehensive site compliance evaluations should be conducted twice a year. The individual or individuals who will conduct the inspections must be identified in the plan and should be members of the pollution prevention team. Inspection reports must be retained for at least 3 years after the date that the permit expires.

(e) Where compliance evaluation schedules overlap with inspections required under XI.Z.3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with leather tanning and finishing facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Leather tanning and finishing facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table Z-1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table Z-1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE Z—1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Five-Day Biological Oxygen Demand (BOD_5)	9.0
Total Kjeldahl Nitrogen (TKN)	1.5
Nitrate and Nitrite Nitrogen	0.68
Total Recoverable Aluminum	0.75
Total Recoverable Manganese	0.05

(1) *Monitoring Periods.* Leather tanning and finishing facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) *Sample Type.* A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) *Sampling Waiver*

(a) *Adverse Conditions*—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table Z–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with leather tanning and finishing facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), leathering tanning and finishing facilities with at least one

storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(4) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

AA. Storm Water Discharges Associated With Industrial Activity From Fabricated Metal Products Industry

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges associated with industrial activity from the fabricated metals industry, Standard Industrial Classification (SIC) Codes listed below, except for electrical related industries:

- SIC Major Group 34 Fabricated Metal Products
- SIC 391 Jewelry, Silverware, and Plated Ware.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges

(1) This permit does not authorize the discharge of process wastewater. Discharges of storm water commingled with process wastewater are not authorized under this permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all industrial activities and significant materials which may potentially be significant pollutant sources. Each plan shall specifically identify the physical features of the facility that may contribute to storm water runoff. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part

IX.AA.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: raw metal storage areas, finished metal storage areas, scrap disposal collection sites, equipment storage areas, retention and detention basins, temporary diversion dikes or berms, permanent diversion dikes or berms, right-of-way or perimeter diversion devices, any sediment traps or barriers, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas including outside painting areas, wood preparation, recycling and raw material storage.

(ii) For each area of the facilities that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. A prediction of the direction of flow and identity of the types of pollutants which are likely to be present in storm water discharges, in particular, flows with a significant potential for causing erosion shall be identified such as heavy equipment use areas, drainage from roofs, parking lots, etc.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Significant spills that should be considered for the fabricated metals industry includes but are not limited to chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals and hazardous chemicals and wastes. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit. The data collected as a representative sampling protocol for the approved facilities in the group should be made a part of the sampling data for these facilities.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations for paints, chemicals and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cob, chemicals, scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, brazing, etc; significant dust or particulate generating processes; and onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingots pieces, refuse and waste piles. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical or chemical oxygen demand, chromium, total suspended solids, oil and grease, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The description of storm water management controls shall at a minimum address the following components of the plan, including a schedule for implementing the plan that shall not exceed the stipulated timeframe identified in this permit.

(i) Good Housekeeping—Fabricating industries shall include the following best management practices in their storm water pollution prevention plan:

- *Metal Fabricating Areas*—Measures for maintaining clean, dry, orderly conditions in these areas. Use of dry clean-up techniques should be considered in the plan.
- *Storage Areas for Raw Metal*—Measures to keep these areas free of conditions that could cause spills or leakage of materials. Storage areas should be maintained for easy access in case spill clean up is necessary. Stored materials should be able to be identified correctly and quickly.
- *Receiving, Unloading, and Storage Areas*—Measures to prevent spills and leaks; plan for quick remedial clean up and instruct employees on the use of clean-up techniques.
- *Storage of Equipment*—The plan should provide measures for preparing equipment for storage and the proper method to store equipment including protecting with covers, storing indoors. The plan should include clean-up measures for equipment that will be stored outdoors to remove potential pollutants.

(b) Preventive Maintenance—Preventive maintenance measures shall include timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. In particular for the fabricated metal industries special consideration should be given to the following areas for preventive maintenance:

- *Metal Working Fluid Areas*—The plan should include measures that identify controls particularly for storage of metal working fluids.
- *Cleaners and Rinse Water*—Measures should be included to control and cleanup spills of solvents and other liquid cleaners; control sand buildup and disbursement from sand-blasting operations, preventing exposure of recyclable wastes; and employ substitute cleaners when possible.
- *Raw Steel Handling Storage*—The plan should include measures controlling or recovering scrap metals.

fines, and iron dust, including measures for containing materials within storage handling areas.

• *Paints and Painting Equipment*—The plan should consider control measures to prevent or minimize exposure of paint and painting equipment from exposure to storm water.

• *Lubricating Oil and Hydraulic Fluid Operations*—The plan should include using devices or monitoring equipment to determine and control leaks and overflows, including the installation of perimeter controls such as dikes, curbs, grass filter strips, or other equivalent measure.

• *Chemical Storage Areas*—The plan should clearly identify materials, proper storage that prevents storm water contamination and prevents accidental spillage. The plan should include a program to inspect containers, and identify proper disposal and spill controls.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. Metal fabricators shall at a minimum include the following areas for inspection: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, fueling and maintenance areas, and waste management areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.AA.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting a notice of intent to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall identify structural, vegetative, and/or stabilization measures to be used to limit erosion. These shall include but not be limited to grass swales, filter strips, treatment works, or other equivalent measures. Metal fabricators must include in their plan measures to minimize erosion caused by the high volume of traffic from heavy equipment for delivery to and from the facility and for equipment operating at the facility on a daily basis such as forklifts, cranes, etc.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutant(s) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activities under the SIC codes identified under paragraph XI.AA.1. of this section shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at

least twice a year, once annually during wet weather and once during dry weather as specified in the plan. Such evaluations shall include:

(a) Areas contributing to a storm water discharge associated with storage of raw metals, storage of spent solvents and chemicals, outdoor paint areas, drainage from roof, unloading and loading areas, equipment storage areas, recycling areas, and retention ponds (sludge); included but not limited to chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and other related materials shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, such as detention basins and channels, gutters or drains to direct discharge flow, oil/water separators in storm drains, containment structures, concrete pads, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment and containment drums, shall be made to determine if the equipment is functioning properly and that drums are not in a corrosive or deteriorating state.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.AA.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.AA.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.AA.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Analytical Monitoring Requirements. During the period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] and the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance], permittees with metal fabricating facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). Metal fabricating facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table AA–1 below. Facilities must report in accordance with 5.b. (Reporting). In addition to the parameters listed in Table AA–1 below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

TABLE AA–1.—MONITORING REQUIREMENTS

Pollutants of concern	Monitoring cut-off concentration (mg/L)
Total Recoverable Aluminum	0.75
Total Recoverable Copper	0.009
Total Recoverable Iron	0.3
Total Recoverable Manganese	0.05
Total Recoverable Zinc	0.065
Nitrate + Nitrite Nitrogen	0.68

(1) Monitoring Periods. Metal fabricating facilities shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph a. (above).

(2) Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

(3) Sampling Waiver

(a) Adverse Conditions—When a discharger is unable to collect samples during one of the monitoring periods specified in paragraph b. (Monitoring Periods) because of adverse climatic

conditions, the discharger may collect two samples from the two separate qualifying events in the next monitoring period and submit this data. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(b) Low Concentration Waiver—When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the monitoring period [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] is less than the corresponding value for that pollutant listed in Table AA–1 under the column Monitoring Cut-off Concentration, a facility may waive monitoring and reporting requirements in the monitoring period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance]. The facility must submit to the Director, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(4) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan. The permittee shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

(5) Alternative Certification. A discharger is not subject to the monitoring requirements of this section provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G. (Signatory Requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.C. of this permit.

b. Reporting. Permittees with metal fabricating facilities shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the reporting period beginning [insert date 1 year after permit issuance] lasting through [insert date 2 years after permit issuance] on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March [insert the date 2 years after permit issuance]. Monitoring results [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the period beginning [insert date 3 years after permit issuance] lasting through [insert date 4 years after permit issuance] shall be submitted on Discharge Monitoring Report Form(s) postmarked no later than the 31st day of the following March. A separate Discharge Monitoring Report Form is required for each quarterly sampling period. Signed copies of Discharge Monitoring Reports, or said certifications, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part VI.G. of the fact sheet.

(1) Additional Notification. In addition to filing copies of discharge monitoring reports in accordance with paragraph b (above), metal fabricating facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

c. Monthly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each month during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

(2) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially

identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

AB. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery

1. Discharges Covered Under This Section

a. This section covers storm water discharges associated with industrial activity transportation equipment, industrial or commercial machinery manufacturing facilities including: Industrial and Commercial Machinery and Computer Equipment Standard Industrial Classification (SIC) Major Group 35 except SIC 357, and Transportation Equipment (SIC Major Group 37, except SIC 373). Facilities with industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas for raw material and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water are covered for by this permit.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions. There are no additional requirements other than those in Part III. of the permit.

3. Storm Water Pollution Prevention Plan Requirements

a. *Contents of Plan.* The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify the specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Site Map—A site map indicating the pattern of storm water drainage, existing structural control measures to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, and locations where major spills or leaks identified under Part XI.AB.3.a.(2)(c) (Spills and Leaks) of this permit have occurred since 3 years prior to the effective date of this permit. The map must also indicate the locations of all industrial activities that are exposed to precipitation, including, but not limited to: Loading/unloading areas; waste treatment; storage and disposal locations; liquid storage tanks; vents and stacks from metal processing and similar operations; significant dust or particulate generating areas; and any other processing and storage areas exposed to storm water. Flows with a significant potential for causing erosion shall also be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not excess of reporting requirements and releases of materials that are not classified as oil or hazardous substance. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: Loading and unloading operations; outdoor storage activities; significant dust or particulate generating processing activities; and onsite waste disposal. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., oil and grease, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner. Areas where good housekeeping practices should be implemented are storage areas for raw materials, waste materials and finished products; loading/unloading areas; and waste disposal areas for hazardous and nonhazardous wastes. Examples of good housekeeping measures include sweeping; labelling drums containing hazardous materials; and preventive monitoring practices (e.g., routine observation of manufacturing processes).

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Areas to be identified should include loading/unloading areas, outdoor storage areas, and waste management areas exposed to storm water. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup should be available to personnel.

(d) Inspections—Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility annually. At a minimum, the following areas, where the potential for exposure to storm water exists, must be inspected on a regularly scheduled basis: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; and vents and stacks from industrial activities. For any problems identified during inspections, the plan shall be revised to include measures to address these problems. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping, material management practices, unloading/loading practices, outdoor storage areas, waste management practices, proper handling procedures of hazardous waste, and improper connections to the storm sewer. At a minimum, this training should be provided annually. The pollution prevention plan shall identify frequencies and approximate dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. Ineffective BMPs should be reported and the date of their corrective actions noted.

(g) Non-storm Water Discharges.

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges as identified in Part III.A.2.a. of this permit. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part XI.AB.3.a.(3)(g)(iv) (Failure to Certify) of this permit.

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) If the facility discharges wastewater, other than storm water via an existing NPDES permit, a copy of the NPDES permit authorizing the discharge must be attached to the plan. Similarly, if the facility submitted an application for an NPDES permit for non-storm water discharges, but has not yet received that permit, a copy of the permit application must be attached. Upon issuance or reissuance of an NPDES permit, the facility must modify its plan to include a copy of that permit. For facilities that discharge wastewater, other than solely domestic wastewater, to a Publicly Owned Treatment Works (POTW), the facility must notify the POTW of its discharge. Proof of this notification should be attached to the plan in the form of either (1) a copy of the permit issued by the treatment plant to the facility or (2) a copy of a notification letter to the POTW. Notification should identify, in general, the types of wastewater discharged to the POTW, including any storm water

discharges. In any of these cases, specific permit conditions must be considered in the plan.

(*iv*) *Failure to Certify*—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(*h*) *Sediment and Erosion Control*—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(*i*) *Management of Runoff*—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see paragraph XI.AB.3.a.(2) (Description of Potential Pollutant Sources) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices. In addition, the permittee must describe the storm water pollutant source area or activity (storage areas, loading/unloading) to be controlled by each storm water management practice.

(*4*) *Comprehensive Site Compliance Evaluation.* Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(*a*) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(*b*) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part XI.AB.3.a.(2) (Description of Potential Pollutant Sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.AB.3.a.(3) (Measures and Controls) of this permit shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(*c*) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.AB.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(*d*) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional numeric limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November.

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

(e) When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

AC. Storm Water Discharges Associated With Industrial Activity From Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to all storm water discharges associated with industrial activity from facilities commonly identified by Standard Industrial Classification (SIC) major groups 36 and 38 and industrial SIC group 357. Major group 36 includes electronic and other electrical equipment and components, except computer equipment. Major group 38 includes measuring, analyzing, and controlling instruments; photographic, medical and optical goods; watches and clocks. Industrial group 357 includes computer and office equipment.

When an industrial facility, described by the above eligibility provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

If monitoring and pollution prevention plan requirements of another industrial activity section of this permit apply to co-located industrial activities at an industrial facility, the eligibility provisions of that industrial activity section shall not preclude the operator of the industrial facility from complying with the applicable monitoring and pollution prevention plan requirements of that section.

2. Special Conditions

a. Prohibition of Non-storm Water Discharges. Other than as provided in use this Section III.A. of this permit, non-storm water discharges are not authorized by this permit.

3. Storm Water Pollution Prevention Plan Requirements

a. Contents of Plan. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

(2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(a) Drainage

(i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part XI.AC.3.a.(2)(c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials—An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff

between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks—A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data—A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources—A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

(3) Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(a) Good Housekeeping—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

(b) Preventive Maintenance—A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures—Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(d) Inspections—In addition to or as part of the comprehensive site evaluation required under paragraph XI.AC.3.a.(4) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(e) Employee Training—Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures—A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(g) Non-storm Water Discharges

(i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with paragraph XI.AC.3.a.(3)(g)(iii) (below).

(ii) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A. (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(iii) Failure to Certify—Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by [Insert date 270 days after permit issuance] or, for facilities which begin to discharge storm water associated with industrial activity after [Insert date 270 days after permit issuance], 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

(h) Sediment and Erosion Control—The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(i) Management of Runoff—The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see paragraph XI.AC.3.a.(2) of this section (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

(4) Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph XI.AC.3.a.(2) of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph XI.AC.3.a.(3) of this section (Measures and Controls) shall be revised as appropriate within 2 weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection.

(c) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph XI.AC.3.a.(4)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 1 year after coverage under this permit terminates. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G. (Signatory Requirements) of this permit.

(d) Where compliance evaluation schedules overlap with inspections required under 3.a.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

(4) Numeric Effluent Limitations. There are no additional numeric effluent limitations beyond those described in Part V. of this permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a representative storm water discharge associated with industrial activity exposed to storm water. The examination must be made at least once in each designated period [described in (a), below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

(a) Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: December to February; March to May; June to August; and September to November

(b) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The inspection must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. EPA expects that whenever practicable the same individual will carry out the collection and examination of discharges for the life of the permit.

(c) Visual observation reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

(d) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

When a discharger is unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

Addendum A

Pollutants Identified in Tables II and III of Appendix D of 40 CFR Part 122

TABLE II.—ORGANIC TOXIC POLLUTANTS IN EACH OF FOUR FRACTIONS IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GS/MS)

Volatiles:
- 1V acrolein
- 2V acrylonitrile
- 3V benzene
- 5V bromoform
- 6V carbon tetrachloride
- 7V chlorobenzene
- 8V chlorodibromomethane
- 9V chloroethane
- 10V 2-chloroethylvinyl ether
- 11V chloroform
- 12V dichlorobromomethane
- 14V 1,1-dichloroethane
- 15V 1,2-dichloroethane
- 16V 1,1-dichloroethylene
- 17V 1,2-dichloropropane
- 18V 1,3-dichloropropylene
- 19V ethylbenzene
- 20V methyl bromide
- 21V methyl chloride
- 22V methylene chloride
- 23V 1,1,2,2-tetrachloroethane
- 24V tetrachloroethylene
- 25V toluene
- 26V 1,2-trans-dichloroethylene
- 27V 1,1,1-trichloroethane
- 28V 1,1,2-trichloroethane
- 29V trichloroethylene
- 31V vinyl chloride

Acid Compounds:
- 1A 2-chlorophenol
- 2A 2,4-dichlorophenol
- 3A 2,4-dimethylphenol
- 4A 4,6-dinitro-o-cresol
- 5A 2,4-dinitrophenol
- 6A 2-nitrophenol
- 7A 4-nitrophenol
- 8A p-chloro-m-cresol
- 9A pentachlorophenol
- 10A phenol
- 11A 2,4,6-trichlorophenol

Pesticides:
- 1P aldrin
- 2P alpha-BHC
- 3P beta-BHC
- 4P gamma-BHC
- 5P delta-BHC
- 6P chlordane
- 7P 4,4'-DDT
- 8P 4,4'-DDE
- 9P 4,4'-DDD
- 10P dieldrin
- 11P alpha-endosulfan
- 12P beta-endosulfan
- 13P endosulfan sulfate
- 14P endrin
- 15P endrin aldehyde
- 16P heptachlor
- 17P heptachlor epoxide
- 18P PCB–1242
- 19P PCB–1254
- 20P PCB–1221
- 21P PCB–1232
- 22P PCB–1248
- 23P PCB–1260
- 24P PCB–1016
- 25P toxaphene

Base/Neutral:
- 1B acenaphthene
- 2B acenaphthylene
- 3B anthracene
- 4B benzidine
- 5B benzo(a)anthracene
- 6B benzo(a)pyrene
- 7B 3,4-benzofluoranthene
- 8B benzo(ghi)perylene
- 9B benzo(k)fluoranthene
- 10B bis(2-chloroethoxy)methane
- 11B bis(2-chloroethyl)ether
- 12B bis(2-chloroisopropyl)ether
- 13B bis (2-ethylhexyl)phthalate
- 14B 4-bromophenyl phenyl ether
- 15B butylbenzyl phthalate
- 16B 2-chloronaphthalene
- 17B 4-chlorophenyl phenyl ether
- 18B chrysene
- 19B dibenzo(a,h)anthracene
- 20B 1,2-dichlorobenzene
- 21B 1,3-dichlorobenzene
- 22B 1,4-dichlorobenzene
- 23B 3,3-dichlorobenzidine
- 24B diethyl phthalate
- 25B dimethyl phthalate
- 26B di-n-butyl phthalate
- 27B 2,4-dinitrotoluene
- 28B 2,6-dinitrotoluene
- 29B di-n-octyl phthalate
- 30B 1,2-diphenylhydra-zine (as azobenzene)
- 31B fluroranthene
- 32B fluorene
- 33B hexachlorobenzene
- 34B hexachlorobutadiene
- 35B hexachlorocyclopentadiene
- 36B hexachloroethane
- 37B indeno(1,2,3-cd)pyrene
- 38B isophorone
- 39B napthalene
- 40B nitrobenzene
- 41B N-nitrosodimethylamine
- 42B N-nitrosodi-n-propylamine
- 43B N-nitrosodiphenylamine
- 44B phenanthrene
- 45B pyrene
- 46B 1,2,4-trichlorobenzene

TABLE III.—OTHER TOXIC POLLUTANTS (METALS AND CYANIDE) AND TOTAL PHENOLS

- Antimony, Total
- Arsenic, Total
- Beryllium, Total
- Cadmium, Total
- Chromium, Total
- Copper, Total
- Lead, Total
- Mercury, Total
- Nickel, Total
- Selenium, Total
- Silver, Total
- Thallium, Total
- Zinc, Total
- Cyanide, Total
- Phenols, Total

TABLE V.—TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY EXISTING DISCHARGERS IF EXPECTED TO BE PRESENT

Toxic Pollutants:
- Asbestos

Hazardous Substances:
- Acetaldehyde
- Allyl alcohol
- Allyl chloride
- Amyl acetate
- Aniline
- Benzonitrile
- Benzyl chloride
- Butyl acetate
- Butylamine
- Captan
- Carbaryl
- Carbofuran
- Carbon disulfide
- Chlorpyrifos
- Coumaphos
- Cresol
- Crotonaldehyde
- Cyclohexane
- 2,4–D (2,4–Dichlorophenoxy acetic acid)
- Diazinon
- Dicamba
- Dichlobenil
- Dichone
- 2,2–Dichloropropionic acid
- Dichlorvos
- Diethyl amine
- Dimethyl amine
- Dintrobenzene
- Diquat
- Disulfoton
- Diuron
- Epichlorohydrin
- Ethion
- Ethylene diamine
- Ethylene dibromide
- Formaldehyde
- Furfural
- Guthion
- Isoprene
- Isopropanolamine Dodecylbenzenesulfonate
- Kelthane
- Kepone
- Malathion
- Mercaptodimethur
- Methoxychlor
- Methyl mercaptan
- Methyl methacrylate
- Methyl parathion
- Mevinphos
- Mexacarbate
- Monoethyl amine
- Monomethyl amine
- Naled
- Napthenic acid
- Nitrotoluene
- Parathion
- Phenosulfanate
- Phosgene
- Propargite
- Propylene oxide
- Pyrethrins
- Quinoline
- Resorcinol
- Strontium
- Strychnine
- Styrene
- 2,4,5–T (2,4,5–Trichlorophenoxy acetic acid)

TABLE V.—TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY EXISTING DISCHARGERS IF EXPECTED TO BE PRESENT—Continued

TDE (Tetrachlorodiphenylethane)
2,4,5–TP [2-(2,4,5–Trichlorophenoxy) propanoic acid]
Trichlorofan
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

Addendum B

Notice of Intent (NOI) Form (an NOI will not appear in today's proposed permit but will be included in the final rule)

Addendum C

Notice of Termination (NOT) Form (an NOT will not appear in today's proposed permit but will be included in the final rule)

Addendum D

Large, Medium, and Designated Municipalities (Incorporated Places)

State and Place Name

Alaska
- Anchorage city*

Alabama
- Adamsville city
- Alabaster city
- Bessemer city
- Birmingham city*
- Brighton city
- Brookside town
- Chickasaw city
- Creola city
- Daphne city
- Fairfield city
- Fairhope city
- Fultondale city
- Gardendale city
- Graysville city
- Helena city
- Homewood city
- Hoover city
- Hueytown city
- Huntsville city*
- Indian Springs
- Irondale city
- Leeds city
- Lipscomb city
- Madison city
- Maytown town
- Midfield city
- Mobile city*
- Montgomery city*
- Moody town
- Mountain Brook city
- Mulga town
- Pelham city
- Pleasant Grove city
- Prichard city
- Saraland city
- Satsuma city
- Tarrant city
- Trussville city
- Vestavia Hills city

Arkansas
- Little Rock city*

Arizona
- Glendale city†
- Mesa city*
- Phoenix city*
- Scottsdale city†
- Tempe city*
- Tucson city*

California
- Agoura Hills city
- Alameda city
- Albany city
- Alhambra city
- Anaheim city*
- Arcadia city
- Artesia city
- Atherton town
- Azusa city
- Bakersfield city*
- Baldwin Park city
- Bell city
- Bellflower city
- Bell Gardens city
- Belmont city
- Berkeley city*
- Beverly Hills city
- Big Bear Lake city
- Bradbury city
- Brentwood city
- Brisbane city
- Burbank city
- Burlingame city
- Camarillo city
- Campbell city
- Carlsbad city
- Carson city
- Cerritos city
- Chula Vista city†
- Claremont city
- Clayton city
- Colma town
- Commerce city
- Compton city
- Concord city
- Contra Costa county (15 cities)
- Coronado city
- Covina city
- Cudahy city
- Culver City city
- Cupertino city
- Daly City city
- Del Mar city
- Diamond Bar city
- Downey city
- Duarte city
- Dublin city
- East Palo Alto city
- El Cajon city
- El Monte city†
- El Segundo city
- Emeryville city
- Encinitas city
- Escondido city†
- Fairfield city
- Fillmore city
- Folsom city
- Foster City city
- Fremont city*
- Fresno city*
- Fullerton city*
- Galt city
- Gardena city
- Garden Grove city*
- Gilroy city
- Glendale city*
- Glendora city
- Half Moon Bay city
- Hawaiian Gardens city
- Hawthorne city
- Hayward city†
- Hermosa Beach city
- Hidden Hills city
- Hillsborough town
- Huntington Beach city*
- Huntington Park city
- Imperial Beach city
- Industry city
- Inglewood city†
- Irvine city†
- Irwindale city
- La Canada Flintridge city
- Laguna Beach city
- Lake Tahoe Basin (1 city)
- Lakewood city
- La Mesa city
- La Mirada city
- La Palma city
- La Puente city
- La Verne city
- Lawndale city
- Lemon Grove city
- Livermore city
- Lomita city
- Long Beach city*
- Los Alamitos city
- Los Altos city
- Los Altos Hills town
- Los Angeles city*
- Los Gatos town
- Lynwood city
- Manhattan Beach city
- Maywood city
- Menlo Park city
- Millbrae city
- Milpitas city
- Modesto city*
- Monrovia city
- Montebello city
- Monterey Park city
- Monte Sereno city
- Moorpark city
- Moreno Valley city†
- Mountain View city

Note: Unless indicated otherwise, municipalities have been designated.

* Identified in November 1990 rule.

† 1990 Census population increased to over 100,000.

National City city
Newark city
Norwalk city
Oakland city*
Oceanside city†
Ojai city
Ontario city†
Orange city†
Orange county (17 cities)
Oxnard city*
Pacifica city
Palo Alto city
Palos Verdes Estates city
Paramount city
Pasadena city*
Pico Rivera city
Piedmont city
Pleasanton city
Pomona city†
Port Hueneme city
Poway city
Rancho Cucamonga city†
Rancho Palos Verdes city
Redondo Beach city
Redwood City city
Riverside city*
Riverside county (10 cities)
Rolling Hills city
Rolling Hills Estates city
Rosemead city
Sacramento city*
Salinas city†
San Bernardino city*
San Bernardino county (13 cities)
San Bruno city
San Carlos city
San Diego city*
San Dimas city
San Fernando city
San Gabriel city
San Jose city*
San Leandro city
San Marcos city
San Marino city
San Mateo city
Santa Ana city*
Santa Clara
Santa Clarita city†
Santa Fe Springs city
Santa Monica city
Santa Paula city
Santa Rosa city†
Santee city
Saratoga city
Seal Beach city
Sierra Madre city
Signal Hill city
Simi Valley city†
Solana Beach city
South El Monte city
South Gate city
South Pasadena city
South San Francisco city
Stockton city*
Suisun City city
Sunnyvale city*
Temple City city
Thousand Oaks city†
Torrance city*
Union City city
Vallejo city†
Vernon city
Vista city
Walnut city
West Covina city
West Hollywood city
Westlake Village city
Whittier city
Woodside town

Colorado
Aurora city*
Colorado Springs city*
Denver city*
Englewood city
Lakewood city*
Pueblo city

Connecticut
Stamford city*

District of Columbia
Washington city*

Delaware
Arden village
Ardencroft village
Ardentown village
Bellefonte town
Delaware City city
Elsmere town
Middletown town
Newark city
New Castle city
Newport town
Odessa town
Townsend town
Wilmington city

Florida
Apopka city
Atlantic Beach city
Atlantis city
Auburndale city
Bal Harbour village
Bartow city
Bay Harbor Islands town
Bay Lake city
Belleair town
Belleair Beach city
Belleair Bluffs city
Belle Glade city
Belle Isle city
Boca Raton city
Boynton Beach city
Briny Breezes town
Century town
Clearwater city
Cloud Lake town
Coconut Creek city
Cooper City city
Coral Gables city
Coral Springs city
Dania city
Davenport city
Davie town
Deerfield Beach city
Delray Beach city
Dundee town
Dunedin city
Eagle Lake city
Eatonville town
Edgewood city
Fort Lauderdale city*
Fort Meade city
Frostproof city
Glen Ridge town
Golden Beach town
Golf village
Golfview town
Greenacres City city
Gulfport city
Gulf Stream town
Haines City city
Hallandale city
Haverhill town
Hialeah city*
Hialeah Gardens city
Highland Beach town
Highland Park village
Hillcrest Heights town
Hollywood city*
Homestead city
Hypoluxo town
Indian Creek village
Indian Rocks Beach city
Jacksonville Beach city
Jacksonville city*
Juno Beach town
Jupiter town
Jupiter Inlet Colony town
Key Biscayne village
Kenneth City town
Lake Alfred city
Lake Buena Vista city
Lake Clarke Shores town
Lake Hamilton town
Lakeland city
Lake Park town
Lake Wales city
Lake Worth city
Lantana town
Largo city
Lauderdale-by-the-Sea town
Lauderdale Lakes city
Lauderhill city
Lighthouse Point city
Longboat Key town
Madeira Beach city
Maitland city
Manalapan town
Mangonia Park town
Margate city
Medley town
Miami city*
Miami Beach city
Miami Shores village
Miami Springs city
Miramar city
Mulberry city
Neptune Beach city
North Bay Village city
North Lauderdale city
North Miami city
North Miami Beach city
North Palm Beach village
North Port city
North Redington Beach town
Oakland Park city
Ocean Ridge town
Ocoee city
Oldsmar city

Opa-locka city
Orlando city*
Pahokee city
Palm Beach town
Palm Beach Gardens city
Palm Beach Shores town
Palm Springs village
Parkland city
Pembroke Park town
Pembroke Pines city
Pennsuee
Pensacola city
Pinellas Park city
Plantation city
Plant City city
Polk City town
Pompano Beach city
Redington Beach town
Redington Shores town
Riviera Beach city
Royal Palm Beach village
Safety Harbor city
St. Petersburg Beach city
St. Petersburg city*
Sarasota city
Sea Ranch Lakes village
Seminole city
South Bay city
South Miami city
South Palm Beach town
South Pasadena city
Sunrise city
Surfside town
Sweetwater city
Tallahassee city†
Tamarac city
Tampa city*
Tarpon Springs city
Temple Terrace city
Tequesta village
Treasure Island city
Venice city
West Miami city
West Palm Beach city
Wilton Manors city
Winter Garden city
Winter Haven city
Winter Park city

Georgia
Acworth city
Alpharetta city
Atlanta city*
Austell city
Bloomingdale city
Buford city
Chamblee city
Clarkston city
College Park city
Columbus city*
Decatur city
Doraville city
Duluth city
East Point city
Fairburn city
Forest Park city
Garden City city
Hapeville city
Jonesboro city
Kennesaw city
Lawrenceville city
Lilburn city
Lithonia city
Macon city*
Marietta city
Morrow city
Norcross city
Palmetto city
Payne city
Pooler city
Powder Springs city
Riverdale city
Roswell city
Savannah city*
Smyrna city
Snellville city
Stone Mountain city
Sugar Hill city
Suwanee city
Thunderbolt town
Union City city

Iowa
Cedar Rapids city*
Davenport city
Des Moines city*

Idaho
Boise City city*
Garden City city

Illinois
Rockford city*
Springfield city†

Indiana
Fort Wayne city*
Indianapolis city*

Kansas
Kansas City city*
Overland Park city'
Topeka city*
Wichita city*

Kentucky
Lexington-Fayette*
Louisville city*

Louisiana
Baton Rouge city*
New Orleans city*
Shreveport city*

Massachusetts
Boston city*
Worcester city*

Maryland
Baltimore city*

Michigan
Ann Arbor city*
Flint city*
Grand Rapids city*
Sterling Heights city*
Warren city*

Minnesota
Minneapolis city*
St. Louis Park city
St. Paul city*

Missouri
Independence city*
Kansas City city*
Springfield city*

Mississippi
Jackson city*

Nebraska
Lincoln city*
Omaha city*

New Mexico
Albuquerque city*

Nevada
Henderson city
Las Vegas city*
North Las Vegas city
Reno city*
Sparks city

New York
New York city*
(Bronx Borough)
(Brooklyn Borough)
(Manhattan Borough)
(Queens Borough)
(Staten Island Borough)

North Carolina
Charlotte city*
Durham city*
Fayetteville city
Greensboro city*
Raleigh city*
Winston-Salem city*

Ohio
Akron city*
Cincinnati city*
Cleveland city*
Columbus city*
Dayton city*
Toledo city*

Oklahoma
Oklahoma City city*
Tulsa city*

Oregon
Banks city
Barlow city
Beaverton city
Canby city
Cornelius city
Durham city
Estacada city
Eugene city*
Fairview city
Forest Grove city
Gaston city
Gladstone city
Gresham city
Happy Valley city
Hillsboro city
Johnson City city
King City city
Lake Oswego city
Milwaukie city
Molalla city
North Plains city
Oregon City city
Portland city*
Rivergrove city
Salem city†
Sandy city
Sherwood city
Tigard city
Tualatin city
West Linn city
Wilsonville city

Pennsylvania
Allentown city*
Philadelphia city*

South Dakota

Sioux Falls City
Tennessee
Bartlett town
Belle Meade city
Berry Hill city
Chattanooga city*
Collierville town
East Ridge city
Forest Hills city
Germantown city
Goodlettsville city
Knoxville city*
Lakewood city
Memphis city*
Nashville-Davidson*
Oak Hill city
Red Bank city
Ridgetop town
Texas
Abilene city†
Amarillo city*
Arlington city*
Austin city*
Beaumont city*
Corpus Christi city*
Dallas city*
El Paso city*
Fort Worth city*
Garland city*
Houston city*
Irving city*
Laredo city†
Lubbock city*
Mesquite city†
Pasadena city*
Plano city†
San Antonio city*
Waco city*
Utah
Salt Lake City city*
Virginia
Chesapeake city*
Hampton city*
Newport News city*
Norfolk city*
Portsmouth city*
Richmond city*
Roanoke city
Virginia Beach city*
Washington
Seattle city*
Tacoma city*
Wisconsin
Madison city*
Milwaukee city*

Large, Medium, and Designated Municipalities (Counties)

State and County

Alabama
Baldwin county [1]
Jefferson county [7]
Mobile county [8]
Shelby county [9]
St. Clair county [10]
Arizona
Pima County *
California
Alameda County*
Contra Costa County*
Kern County*
Lake Tahoe Basin (2 counties)*
Los Angeles County*
Orange County*
Riverside County*
Sacramento County
San Bernardino County*
San Diego County*
San Mateo County
Santa Clara County
Ventura County
Colorado
Arapahoe County†
Delaware
New Castle County*
Florida
Broward County*
Dade County*
Escambia County*
Hillsborough County*
Lee County†
Manatee County†
Orange County*
Palm Beach County*
Pasco County†
Pinellas County*
Polk County*
Sarasota County*
Seminole County†
Georgia
Bibb County
Chatham County
Clayton County*
Cobb County*
DeKalb County*
Fulton County†
Gwinnett County†
Muscogee County
Richmond County*
Hawaii
Honolulu County*
Kentucky
Jefferson County*
Louisiana
East Baton Rouge Parish†
Jefferson Parish*
Maryland
Anne Arundel County*
Baltimore County*
Carroll County
Charles County
Frederick County
Harford County
Howard County†
Montgomery County*
Prince George's County*
Washington County
North Carolina
Cumberland County*
Nevada
Clark County*
Washoe County
Oregon
Clackamas County
Multnomah County
Washington County*
South Carolina
Greenville County*
Richland County*
Texas
Harris County*
Utah
Salt Lake County*
Virginia
Arlington County*
Chesterfield County*
Fairfax County*
Henrico County*
Prince William County†
Washington
Clark County†
King County*
Pierce County*
Snohomish County*
Spokane County†

Large, Medium, and Designated Municipalities (Boundaries Not Defined by Census)

State and Municipal Separate Storm Sewer System

Alaska
DOT [1]
University of Alaska
Alabama
Highway Department
Arizona
DOT
California
Alameda County Flood Control District
Zone 7 of the Alameda County Flood Control District
DOT
Coachella Valley Area
Contra Costa County Flood Control District
Orange County Flood Control District
Riverside Flood Control District
San Bernardino Flood Control District
San Diego Unified Port District
Santa Clara Valley Water District
Colorado
DOT
Highway Department
Delaware

[1] Department of Transportation

[7] County was listed in regulation; however, population dropped below 100,000 in 1990 census.

[8] Unincorporated areas defined as: beginning at the mouth of the South Fork Deer River and extending west to SW corner Section 18, Township 6 South, Range 2 West, thence north to NW corner, Section 6, Township 2 South, Range 2 West, thence east to the Mobile County line, thence south along the county line to U.S. Highway 90 bridge.

[9] All unincorporated areas of Shelby County within the drainage basin of the Cahaba River upstream of the confluence of Shoal Creek and the Cahaba River.

[10] Unincorporated areas of St. Clair County within the drainage basin of the Cahaba River.

* Identified November 1990 rule.

† 1990 Census unincorporated, urbanized population increased to more than 100,000.

DOT
Florida
DOT
Urban Water Control Districts
Hawaii
DOT
Idaho
DOT
Illinois
DOT
Indiana
DOT
Kansas
Fairfax Drainage District
Kaw Valley Drainage District
Louisiana
DOT
Maryland
State Highway Administration
Michigan
University of Michigan
DOT
Minnesota
DOT
North Carolina
DOT
Nevada
Clark County Flood Control District
DOT
New Mexico
Albuquerque Metropolitan Flood Control Authority
DOT
Ohio
DOT
Oklahoma
DOT
Oregon
DOT
Port of Portland
Pennsylvania
DOT
South Carolina
Harbor of Charleston
Tennessee
DOT
Texas
Harris County Flood Control District
DOT
Utah
DOT
Wisconsin
DOT
University of Wisconsin

Addendum E

Basic Format for Environmental Assessment

This is the basic format for the Environmental Assessment prepared by EPA from the review of the applicant's Environmental Information Document (EID) required for new source NPDES permits. Comprehensive information should be provided for those items or issues that are affected; the greater the impact, the more detailed information needed. The EID should contain a brief statement addressing each item listed below, even if the item is not applicable. The statement should at least explain why the item is not applicable.

A. General Information
1. Name of applicant
2. Type of facility
3. Location of facility
4. Product manufactured

B. Description Summaries
1. Describe the proposed facility and construction activity
2. Describe all ancillary construction not directly involved with the production processes
3. Describe briefly the manufacturing processes and procedures
4. Describe the plant site, its history, and the general area

C. Environmental Concerns
1. Historical and Archeological (include a statement from the State Historical Preservation Officer)
2. Wetlands Protection and 100-year Floodplain Management (the Army Corps of Engineers must be contacted if any wetland area of floodplain is affected)
3. Agricultural Lands (a prime farmland statement from the Soil Conservation Service must be included
4. Coastal Zone Management and Wild and Scenic Rivers
5. Endangered Species Protection and Fish and Wildlife Protection (a statement from the U.S. Fish and Wildlife Service must be included)
6. Air, Water, and Land Issues: quality, effects, usage levels, municipal services used, discharges and emissions, runoff and wastewater control, geology and soils involved, land-use compatibility, solid and hazardous waste disposal, natural and man-made hazards involved.
7. Biota concerns: floral, faunal, aquatic resources, inventories, and effects
8. Community Infrastructures available and resulting effects: social, economic, health, safety, educational, recreational, housing, transportation, and road resources

Basic Environmental Information Document Guidelines for New Source Category Industries

I. General Information

A. Name of Applicant and Proposed Facility: _____

B. Description of Site and Location: _____

C. Description of Project, Product, and Process: _____

Addendum F

Section 313 Water Priority Chemicals

CAS No.	Common name
75-07-0	Acetaldehyde.
107-02-8	Acrolein.
107-13-1	Acrylonitrile.
309-00-2	Aldrin[1,4:5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)-].
107-05-1	Allyl Chloride.
7429-90-5	Aluminum (fume or dust).
7664-41-7	Ammonia.
62-53-3	Aniline.
120-12-7	Anthracene.
7440-36-0	Antimony.
7647189	Antimony pentachloride.
28300745	Antimony potassium tartrate.
7789619	Antimony tribromide.
10025919	Antimony trichloride.

CAS No.	Common name
7783564	Antimony trifluoride.
1309644	Antimony trioxide.
7440-38-2	Arsenic.
1303328	Arsenic disulfide.
1303282	Arsenic pentoxide.
7784341	Arsenic trichloride.
1327533	Arsenic trioxide.
1303339	Arsenic trisulfide.
1332-21-4	Asbestos (friable).
542621	Barium cyanide.
71-43-2	Benzene.
92-87-5	Benzidine.
100470	Benzonitrile.
100-44-7	Benzyl chloride.
7440-41-7	Beryllium.
7787475	Beryllium chloride.
7787497	Beryllium fluoride.
7787555	Beryllium nitrate.
111-44-4	Bis(2-chloroethyl) ether.
75-25-2	Bromoform.
74-83-9	Bromomethane (Methyl bromide).
85-68-7	Butyl benzyl phthalate.
7440-43-9	Cadmium.
543908	Cadmium acetate.
7789426	Cadmium bromide.
10108642	Cadmium chloride.
7778441	Calcium arsenate.
52740166	Calcium arsenite.
13765190	Calcium chromate.
592018	Calcium cyanide.
133-06-2	Captan [1H-Isoindole-1,3(2H)-dione,3a,4,7,7a-tetrahydro-2-[(trichloromethyl)thio]-].
63-25-2	Carbaryl [1-Naphthalenol, methylcarbamate].
75-15-0	Carbon disulfide.
56-23-5	Carbon tetrachloride.
57-74-9	Chlordane [4,7-Methanoindan,1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-].
7782-50-5	Chlorine.
59-50-7	4-Chloro 3-methyl phenol *p*-Chloro-*m*-cresol.
108-90-7	Chlorobenzene.
75-00-3	Chloroethane (Ethyl chloride).
67-66-3	Chloroform.
74-87-3	Chloromethane (Methyl chloride).
95-57-8	2-Chlorophenol.
106-48-9	4-Chlorophenol.
1066304	Chromic acetate.
11115745	Chromic acid.
10101538	Chromic sulfate.
7440-47-3	Chromium.
1308-14-1	Chromium (Tri).
10049055	Chromous chloride.
7789437	Cobaltous bromide.
544183	Cobaltous formate.
14017415	Cobaltous sulfamate.
7440-50-8	Copper.
108-39-4	*m*-Cresol.
9548-7	*o*-Cresol.
106-44-5	*p*-Cresol.
1319-77-3	Cresol (mixed isomers).
142712	Cupric acetate.
12002038	Cupric acetoarsenite.
7447394	Cupric chloride.
3251238	Cupric nitrate.
5893663	Cupric oxalate.
7758987	Cupric sulfate.
10380297	Cupric sulfate, ammoniated.
815827	Cupric tartrate.
57-12-5	Cyanide.
506774	Cyanogen chloride.
94-75-7	2,4-D [Acetic acid, (2,4-dichlorophenoxy)-].
106-93-4	1,2-Dibromoethane (Ethylene dibromide).
84-74-2	Dibutyl phthalate.
95-50-1	1,2-Dichlorobenzene.
541-73-1	1,3-Dichlorobenzene.
106-46-7	1,4-Dichlorobenzene.
91-94-1	3,3'-Dichlorobenzidine.

CAS No.	Common name
75-27-4	Dichlorobromomethane.
107-06-2	1,2-Dichloroethane (Ethylene dichloride).
540-59-0	1,2-Dichloroethylene.
120-83-2	2,4-Dichlorophenol.
78-87-5	1,2-Dichloropropane.
542-75-6	1,3-Dichloropropylene.
62-73-7	Dichlorvos [Phosphoric acid, 2,2- dichloroethenyl dimethyl ester].
115-32-2	Dicofol [Benzenemethanol, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-(trichloromethyl)-].
177-81-7	Di-(2-ethylhexyl) phthalate (DEHP).
84-66-2	Diethyl phthalate.
105-67-9	2,4-Dimethylphenol.
131-11-3	Dimethyl phthalate.
534-52-1	4,6-Dinitro-*o*-cresol.
51-28-5	2,4-Dinitrophenol.
121-14-2	2,4-Dinitrotoluene.
606-20-2	2,6-Dinitrotoluene.
117-84-0	*n*-Dioctyl phthalate.
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene).
106-89-8	Epichlorohydrin.
100-41-4	Ethylbenzene.
106934	Ethylene dibromide.
50-00-0	Formaldehyde.
76-44-8	Heptachlor [1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene].
118-74-1	Hexachlorobenzene.
87-68-3	Hexachloro-1,3-butadiene.
77-47-4	Hexachlorocyclopentadiene.
67-72-1	Hexachloroethane.
7647-01-0	Hydrochloric acid.
74-90-8	Hydrogen cyanide.
7664-39-3	Hydrogen fluoride.
7439-92-1	Lead.
301042	Lead acetate.
7784409	Lead arsenate.
7645252	Lead arsenate.
10102484	Lead arsenate.
7758954	Lead chloride.
13814965	Lead fluoborate.
7783462	Lead fluoride.
10101630	Lead iodide.
10099748	Lead nitrate.
7428480	Lead stearate.
1072351	Lead arsenate.
52652592	Lead arsenate.
7446142	Lead sulfate.
1314870	Lead sulfide.
592870	Lead thiocyanate.
58-89-9	Lindane [Cyclohexane, 1,2,3,4,5,6-hexachloro-(1.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-].
14307258	Lithium chromate.
108-31-6	Maleic anhydride.
592041	Mercuric cyanide.
10045940	Mercuric nitrate.
7783359	Mercuric sulfate.
592858	Mercuric thiocyanate.
7782867	Mercurous nitrate.
7439-97-6	Mercury.
72-43-5	Methoxychlor [Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-].
80-62-6	Methyl methacrylate.
91-20-3	Naphthalene.
7440-02-0	Nickel.
15699180	Nickel ammonium sulfate.
37211055	Nickel chloride.
7718549	Nickel chloride.
12054487	Nickel hydroxide.
14216752	Nickel nitrate.
7786814	Nickel sulfate.
7697-37-2	Nitric acid.
98-95-3	Nitrobenzene.
88-75-5	2-Nitrophenol.
100-02-7	4-Nitrophenol.
62-75-9	*N*-Nitrosodimethylamine.
86-30-6	*N*-Nitrosodiphenylamine.
621-64-7	*N*-Nitrosodi-*n*-propylamine.
56-38-2	Parathion [Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester].
87-86-5	Pentachlorophenol (PCP).

CAS No.	Common name
108-95-2	Phenol.
7664-38-2	Phosphoric acid.
7723-14-0	Phosphorus (yellow or white).
1336-36-3	Polychlorinated biphenyls (PCBs).
7784410	Potassium arsenate.
10124502	Potassium arsenite.
7778509	Potassium bichromate.
7789006	Potassium chromate.
151508	Potassium cyanide.
75-56-9	Propylene oxide.
91-22-5	Quinoline.
7782-49-2	Selenium.
7446084	Selenium oxide.
7440-22-4	Silver.
7761888	Silver nitrate.
7631892	Sodium arsenate.
7784465	Sodium arsenite.
10588019	Sodium bichromate.
7775113	Sodium chromate.
143339	Sodium cyanide.
10102188	Sodium selenite.
7782823	Sodium selenite.
7789062	Strontium chromate.
100-42-5	Styrene.
7664-93-9	Sulfuric acid.
79-34-5	1,1,2,2-Tetrachloroethane.
127-18-4	Tetrachloroethylene (Perchloroethylene).
935-95-5	2,3,5,6-Tetrachlorophenol.
78002	Tetraethyl lead.
7440-28-0	Thallium.
10031591	Thallium sulfate.
108-88-3	Toluene.
8001-35-2	Toxaphene.
52-68-6	Trichlorfon [Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-dimethylester].
120-82-1	1,2,4-Trichlorobenzene.
71-55-6	1,1,1-Trichloroethane (Methyl chloroform).
79-00-5	1,1,2-Trichloroethane.
79-01-6	Trichloroethylene.
95-95-4	2,4,5-Trichlorophenol.
88-06-2	2,4,6-Trichlorophenol.
7440-62-2	Vanadium (fume or dust).
108-05-4	Vinyl acetate.
75-01-4	Vinyl chloride.
75-35-4	Vinylidene chloride.
108-38-3	*m*-Xylene.
95-47-6	*o*-Xylene.
106-42-3	*p*-Xylene.
1330-20-7	Xylene (mixed isomers).
7440-66-6	Zinc (fume or dust).
557346	Zinc acetate.
14639975	Zinc ammonium chloride.
14639986	Zinc ammonium chloride.
52628258	Zinc ammonium chloride.
1332076	Zinc borate.
7699458	Zinc bromide.
3486359	Zinc carbonate.
7646857	Zinc chloride.
557211	Zinc cyanide.
7783495	Zinc fluoride.
557415	Zinc formate.
7779864	Zinc hydrosulfite.
7779886	Zinc nitrate.
127822	Zinc phenolsulfonate.
1314847	Zinc phosphide.
16871719	Zinc silicofluoride.
7733020	Zinc sulfate.

Addendum G

Region-Specific Permit Conditions

Region VI—Permits for Louisiana, New Mexico, Oklahoma, and Texas

Unless otherwise specified, the following Region-specific permit requirements apply to the permits for Louisiana (LAR05*###), New Mexico (NMR05*###), Oklahoma (OKR05*###), Texas (TXR05*###), and Indian Lands in these states (LAR05*##F, NMR05*##F, OKR05*##F, or TXR05*##F). Language should be substituted or deleted as indicated.

Part I.B.3. Limitations on Coverage. <Insert the following paragraph for the Oklahoma Permit—OKR05*###>

f. Discharges to Oklahoma Outstanding Resource Waters and Scenic Rivers. "New" point source discharges of storm water associated with industrial activity (those commencing after the June 25, 1992, effective date of the Oklahoma Water Quality Standards—Oklahoma Annotated Code Title 785, Chapter 45) to the following waters:

(1) waterbodies designated as "Outstanding Resource Waters" and/or "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards;

(2) Oklahoma waterbodies located within the watersheds of waterbodies designated as "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards; and

(3) waterbodies located within the boundaries of Oklahoma Water Quality Standards Appendix B areas which are specifically designated as "Outstanding Resource Waters" in Appendix A of the Oklahoma Water Quality Standards.

Part XI.J. Storm Water Discharges Associated With Industrial Activity From Mineral Mining and Processing Facilities

1. Discharges Covered Under This Section <The following paragraphs replace or are in addition to the corresponding paragraphs of the generic permit language.>

b. Limitations on Coverage. The following storm water discharges associated with industrial activity are not authorized by this permit:

(1) Storm water discharges associated with industrial activity which are subject to an existing effluent limitation guideline, except for mine dewatering discharges subject to 40 CFR Part 436, Subparts B, C, and D which are composed of storm water or groundwater seepage only.

4. Numeric Effluent Limitations. In addition to the numeric effluent limitations described by Part V., the following effluent limitations shall be met by existing and new mine dewatering discharges composed entirely of storm water or groundwater seepage from Crushed Stone, Construction Sand and Gravel, and Industrial Sand mines. The provisions of this paragraph are applicable to mine dewatering discharges from the Crushed Stone, Construction Sand and Gravel, and Industrial Sand Subcategories of the Mineral Mining and Processing Point Source Categories (40 CFR 436.20, 436.30 and 436.40) where the discharge is composed entirely of storm water or groundwater seepage. The concentration of pollutants in storm water or mined watering discharges shall not exceed the following effluent limitations:

Effluent characteristics	Effluent limitations (mg/L)	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Total Suspended Solids (TSS)	45 mg/L	25 mg/L.
pH	Within the range 6.0 to 9.0.	Within the range 6.0 to 9.0.

However, if a mine is also used for treatment of process generated waste water, discharges of commingled water from the mine shall be deemed discharges of process generated waste water and this permit does not authorize its discharge. Discharges of storm water commingled with process wastewater must be permitted by a separate NPDES process wastewater discharge permit.

5. Monitoring and Reporting Requirements

a. Monitoring Requirements

(2) Mine Dewatering Discharges from Crushed Stone, Construction Sand and Gravel, and Industrial Sand Mines. During the period beginning on the effective date and lasting through the expiration date of this permit, all Crushed Stone, Construction Sand and Gravel, and Industrial Sand mining facilities will be required to conduct monitoring for their mine dewatering discharges as specified below:

Parameter	Unit	Frequency	Sample Type
Total Flow.	MG	Quarterly	Estimate.
pH	s.u	Quarterly	Grab.
Total Suspended Solids.	mg/L	Quarterly	Grab.

[FR Doc. 93–27463 Filed 11–18–93; 8:45 am]

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federal register

Friday
November 19, 1993

Part III

Department of Health and Human Services

Food and Drug Administration

21 CFR Part 20

Public Information; Communications With Foreign Government Officials; Rule

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 20

[Docket No. 92N–0072]

Public Information; Communications With Foreign Government Officials

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is issuing a final rule amending the regulation governing communications with foreign government officials. This final rule allows the agency to disclose nonpublic safety, effectiveness, or quality information concerning FDA regulated products to foreign government officials who perform counterpart functions without compelling the public disclosure of such information. On June 26, 1992, FDA issued a proposed rule on this subject and invited public comments. This final rule retains and strengthens the requirements set forth in the proposal to protect the confidentiality of the information that is shared. FDA invites interested persons to submit additional comments on the final rule and to suggest changes that would further the agency's public health protection mission through improved sharing of information with foreign government officials.

DATES: This rule becomes effective December 20, 1993. Written comments by March 21, 1994.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA–305), Food and Drug Administration, rm. 1–23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Edwin V. Dutra, Jr., Regulations Policy and Management Staff (HF–26), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–3480.

SUPPLEMENTARY INFORMATION:

I. Background

The existing regulation governing the exchange of information between FDA and foreign government officials in § 20.89 *Communications with foreign government officials* (21 CFR 20.89), provides that FDA may receive confidential commercial information from foreign government officials who perform counterpart functions to FDA and that such information will be exempt from public disclosure. However, under the existing regulation, the agency may not provide such information in its own files to foreign government counterparts even when there is a domestic or global public health need and even when the foreign government offers assurances that the information will be protected from further disclosure.

In the **Federal Register** of June 26, 1992 (57 FR 28648), FDA published a notice of proposed rulemaking to enhance communications with foreign government officials and remove restrictions on international cooperation on new product review and approval. Interested persons were invited to submit written comments by August 25, 1992. In the **Federal Register** of August 14, 1992 (57 FR 36617), FDA extended the period for submission of comments to September 24, 1992, in response to a request for an extension of the comment period. A total of 22 written comments were received. The comments were from the following sources: 15 were from manufacturers, 3 were from foreign governments, 3 were from manufacturers' associations, and 1 was from a law firm.

Many of the comments strongly supported FDA's efforts to harmonize international regulatory requirements, and several recognized the benefits in the United States, as well as in foreign countries, that may be derived from international cooperation on individual product reviews. However, many of the comments also expressed the view that the proposal contained inadequate safeguards to prevent redisclosures of proprietary information.

After review and consideration of all comments, FDA continues to believe that the agency will be better able to accomplish its public health mission if it may, under certain circumstances, share with foreign government counterparts nonpublic data provided by sponsors, expert evaluations by FDA reviewing scientists, and confidential commercial information contained in investigatory records. Therefore, FDA is now amending § 20.89. In response to the comments received, the agency has described more explicitly the safeguards that apply to authorized disclosures of confidential information to foreign government officials.

The amended rule will facilitate approval-related decision-making on FDA regulated articles, and it is expected to be of greatest value in expediting the review of products intended to diagnose or treat serious or life-threatening diseases.

This final rule amending § 20.89 does not change the existing regulatory authority for the agency to disclose to foreign government officials investigatory records compiled for law enforcement purposes.

FDA invites comments on this final rule and on other issues surrounding the disclosure to foreign government officials of nonpublic information that would be important to global public health or to further harmonization of regulatory requirements. The agency recognizes that there are numerous situations where public health interests, both domestic and global, would be better served if the agency could disclose other types of predecisional documents (e.g., draft health hazard alerts or draft regulations) to foreign government officials without invoking the requirement in § 20.21 *Uniform access to records* (21 CFR 20.21). Disclosures of predecisional documents might be limited to announcements of health hazards or to situations where FDA and a foreign counterpart have in place, or are negotiating, an agreement such as a memorandum of understanding, or where the other country is a partner with the United States under free trade agreements.

This final rule amending § 20.89 does not address these broader information disclosure issues encountered in efforts to harmonize regulatory approaches or to cooperate in addressing global public health matters. These other international information disclosure issues may be the subject of future regulatory proposals. The agency is now soliciting comments to help guide the future rulemaking.

FDA's regulations governing public information in part 20 (21 CFR part 20) implement the Freedom of Information Act (FOIA), 5 U.S.C. 552, and other laws that affect public access to government records and information (e.g., 18 U.S.C. 1905 and 21 U.S.C. 331(j)). Section 20.21 of FDA's regulations implementing these laws provides a general rule that any record of the agency that is disclosed in an authorized manner to any member of the public is available for disclosure to all members of the public. In general, communications with foreign government officials currently have the same status as communications with any member of the public. For this reason, and in accordance with FDA's rule on uniform access (§ 20.21), the disclosure of agency records to foreign government officials ordinarily constitutes disclosure to the public and obligates FDA to make the same records available to any person who requests them under the FOIA.

Subpart E of part 20 identifies several categories of people or institutions to whom disclosure of FDA records may be

made without requiring uniform access under § 20.21. One such category consists of foreign government officials who perform counterpart functions to FDA in a foreign country (§ 20.89). Under § 20.89(a), however, although confidential commercial information obtained by such officials and voluntarily disclosed to FDA as part of cooperative law enforcement and regulatory efforts is protected from disclosure under § 20.61. *Trade secrets and commercial or financial information which is privileged or confidential* (21 CFR 20.61), FDA may not disclose to those officials confidential commercial information submitted to, or incorporated into, records prepared by FDA. Under current regulations, disclosure of such information by FDA would invoke the requirement in § 20.21 of uniform access to records.

In 1974, when FDA promulgated the public information regulations now codified at part 20, the agency considered the exchange of confidential commercial information with foreign governments and decided not to make such an exchange an exception to § 20.21.

> * * * Foreign governments have discussed with the Food and Drug Administration the possibility of exchanging data and information on the safety and effectiveness of investigational and marketed drugs.
>
> The Commissioner concludes that the same rules will apply with respect to disclosure of such information to foreign governments as apply to disclosure to the public. This will permit the Food and Drug Administration to provide full summaries of all safety and effectiveness data for all approved NDA's and selected summaries for IND's and pending NDA's of which the existence of an IND has been publicly disclosed or acknowledged. The Commissioner concludes that this will adequately satisfy the need for international exchange of important regulatory information of this type.

(39 FR 44602 at 44636, December 24, 1974).

This rulemaking was undertaken because of FDA's conclusion that its inability under the public information regulations to disclose to foreign government officials confidential commercial information submitted to FDA or incorporated into agency-prepared records is impeding its efforts to meet the current need for international exchange of important regulatory information.

Changed circumstances since 1974 make the restrictions in current § 20.89 undesirable. In the 19 years that have passed since FDA promulgated § 20.89, agency scientists have become increasingly aware of the benefits to consumers in the United States, as well as in foreign countries, of not only reviewing data in the files of foreign government officials, but also sharing with counterpart foreign government officials the results of FDA's scientific evaluations and its investigative activities relating to products that have been or are intended to be manufactured and marketed throughout the world. In addition, increasing harmonization of technical product approval standards throughout the world has diminished earlier differences between the approval processes of various countries and the United States. Furthermore, growing numbers of clinical trials undertaken to support product approval applications in the United States are now conducted in foreign countries as well as in the United States.

Cooperative efforts with government scientists in other countries are particularly important to comprehensive and timely review of products that are being developed to diagnose, cure, mitigate, treat, or prevent life-threatening illnesses. In the case of didanosine (ddI), for example, a drug intended for use in the treatment of acquired immunodeficiency syndrome (AIDS), FDA and its Canadian counterparts received simultaneous submissions of marketing applications from the sponsor, Bristol-Myers Squibb. Thereafter, a joint review by Canadian and FDA authorities facilitated the expeditious approval of the drug. In order to accomplish this joint review in accordance with the current public information regulations, a variety of cumbersome arrangements were undertaken to ensure that the data in the application did not become subject to inappropriate public disclosure. One of the purposes of amending § 20.89 is to clarify and standardize the arrangements needed each time the review of a product stands to benefit from cooperative review by FDA scientists and foreign government counterparts, whether that review is in the context of approving a product, finding that a product is nonapprovable, or withdrawing approval of an already marketed product.

II. Analysis of Comments on the Proposed Rule

1. Several comments from manufacturers suggested that information could best be submitted directly by the firm or individual to the foreign government.

FDA points out that, in the typical case, the foreign government already has the nonpublic information in its files. However, one achievement of this rulemaking is the ability to share and consult on agency-prepared records (e.g., draft and final evaluations by FDA review scientists) that incorporate or refer to nonpublic confidential commercial information. The firm would not be in a position to submit to the foreign government such evaluations by FDA scientists.

2. Comments also asserted that the original proposal was overbroad and unnecessary, and might actually impede approvals.

The agency never intended disclosure to foreign government officials to be a routine occurrence. FDA believes that the preamble to the original proposal made clear that the agency intends to engage in the nonpublic exchange of confidential commercial information with foreign counterparts only when certain conditions are met. In every case, assurances must be provided by the foreign agency that the information will be held in confidence. The final rule expressly establishes that, in addition, before such confidential exchanges may occur, there must be either authorization by the sponsor or a regulatory benefit to FDA in its own review of products or implementation of its mission.

Thus, in addition to foreign governmental confidentiality assurances, any one of three additional conditions must be met: (a) Written authorization by the submitter of the information; (b) a finding that disclosure is in the interest of public health by reason of the foreign government's possessing information concerning the safety, efficacy, or quality of the product or information concerning an investigation; or (c) the disclosure is to a foreign scientist visiting FDA as part of a joint review or long-term cooperative training effort that furthers FDA's regulatory mission.

The first condition provides the mechanism by which the submitter of information authorizes its disclosure to the foreign government. The second condition provides an enhancement of FDA review functions through facilitating consultation with foreign government officials who already are in possession of relevant information on the subject and can contribute to FDA's evaluation. The third condition makes explicit in § 20.89 a longstanding implementation of section 708 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 379) and § 20.90 *Disclosure to contractors* (21 CFR 20.90) in the human drugs and biologics regulatory programs. This criterion also clarifies that there is no need to compel visiting foreign officials to become special Government employees of the United States, as long as specified safeguards concerning physical security,

confidentiality, and financial conflict of interest are met.

FDA emphasizes that the agency will deny requests to share information with officials of foreign governments that lack scientific data or regulatory expertise to contribute to a product review or laboratory or clinical investigation unless the foreign government intends to use the information for law enforcement purposes. Furthermore, under all circumstances, and regardless of the information and expertise in the possession of a foreign government official, the decision to share information is a discretionary one that FDA will make on a case-by-case basis. The disclosure of confidential commercial information to foreign government officials will be administered by designated officials in FDA's respective centers.

In reviewing comments stating that FDA's proposal to amend § 20.89 was unnecessary, agency scientists and investigators provided the following examples of situations in which the ability to share confidential commercial information with foreign governments would have allowed more timely review of significant product applications subject to FDA approval or would have enhanced effective regulatory activities:

a. FDA's centers reported that the current restrictions on disclosure to foreign government authorities have limited the centers' ability to communicate with other countries about adverse effects reports for regulated products.

b. FDA's Center for Veterinary Medicine believes that the current restrictions have hampered investigations of counterfeit bulk animal drugs in international commerce. Although investigatory records related to counterfeiting compiled for law enforcement purposes can be exchanged with foreign government counterparts and protected under the current terms of § 20.89, scientific information concerning the authentic products is often confidential commercial data that cannot be disclosed to foreign governments without triggering the uniform disclosure provision of FDA's public information regulations. The ability to share such information is important to FDA's scientific review and surveillance activities that may precede law enforcement efforts and, in particular, to the development of international profiles for those authentic products that are the object of counterfeiting.

c. The approval times in Europe and in the United States for the therapeutic biological products Neupogen and Proleukin varied significantly because of constraints on sharing data across national boundaries.

d. FDA's Center for Devices and Radiological Health was constrained from sharing confidential commercial information in product applications and inspection reports with foreign government officials during the FDA's call for data on silicone gel-filled breast implants and during the moratorium on the sale and use of those products in this country. Enhanced ability to share information with other governments would have enabled the public health aspects of FDA's actions to be better understood in other countries, and would have eliminated some of the public health concerns and consumer confusion that resulted from inconsistent regulation of these products by different national authorities.

3. A number of comments suggested that definitions of "confidential commercial" and "trade secret" be included in the regulation.

The agency believes that encumbering this regulation with lengthy definitions of trade secret or confidential commercial information is unnecessary. As they are relevant to disclosure of information contained in agency records, those terms have been defined by Federal statute, judicial opinions, and agency practice over many years. The proposal to amend § 20.89 set forth a detailed discussion of the way the agency has in the past, and intends to continue, to interpret these terms. That discussion is being expanded in this document.

Trade secret information has been defined by the courts as information relating to the making, preparing, compounding, or processing of trade commodities (*Public Citizen Health Research Group* v. *FDA*, 704 F.2d 1280, 1288 (D.C. Cir. 1983)). This definition, which requires a "direct relationship" between the trade secret and the productive process, applies to a relatively narrow category of information that coincides with information prohibited from disclosure by section 301(j) of the act (21 U.S.C. 331(j)). The agency is aware that the definition of "trade secret" promulgated in § 20.61(a) in the 1970's is a broader and more inclusive one. Section 20.61(a), however, has since been narrowed by judicial opinions interpreting the FOIA (see *Public Citizen Health Research Group* v. *FDA*; *Anderson* v. *HHS*, 907 F.2d 936, 944 (10th Cir. 1990)), and FDA is in the process of amending § 20.61 to reflect the current legal scope of the trade secret definition. That amendment to § 20.61 is part of an update of the FOIA regulations that reflects changes that were required by the 1986 amendments to the FOIA and which have already been put into practice by the agency.

The amended definition of "trade secret" that will be published in FDA's updating of its part 20 regulations is a restatement of the standard established by *Public Citizen*, and will put the definition in conformity with applicable case law and with the Department of Health and Human Services' FOIA regulations. Because FDA's practice has been in accordance with the judicial standards that resulted from *Public Citizen*, and the definitions promulgated by the Department, the amendment to § 20.61 will not alter the agency's practice in any way or the expectations the public and regulated industry have concerning FDA's treatment of particular types of information.

In any case, the present amendment to § 20.89 does not alter FDA's practice with respect to the narrow category of information that can be considered "trade secret" because, except as discussed below, the proposed amendment to § 20.89 expressly excludes the exchange of information that would fall into that category to foreign officials outside FDA, without the express authorization of the submitter of the information.

The focus of this rulemaking is the sharing of "confidential commercial information," agency-prepared reviews of such information, and investigatory records that include such information. The focus of this rulemaking is not on the nonpublic exchange of trade secret information, the other category of information covered by exemption 4 of the FOIA. The sharing of confidential information, including trade secret information, with visiting foreign scientists insofar as that access is authorized under confidentiality agreements for a training or joint review activity pursuant to section 708 of the act and § 20.90 has been a longstanding agency practice. This final rule (§ 20.89(c)(1)(ii)(C)) codifies the procedures for providing access to such information in the rule on sharing information with foreign officials rather than continuing this practice in the more general § 20.90 procedures.

Commercial or financial information that a person is required to provide FDA is "confidential" for purposes of exemption 4 if disclosure of the information is likely to (1) Impair the Government's ability to obtain necessary information in the future or (2) cause substantial harm to the competitive position of the person from whom the information was obtained. (See *Critical*

Mass Energy Project v. *NRC*, 975 F.2d 871, 877–880 (D.C. Cir. 1992) (en banc), *cert. denied*, 113 S.Ct. 1579 (1993); *National Parks & Conservation Ass'n* v. *Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974)). Commercial or financial information that is provided to FDA on a voluntary basis is "confidential" if it is of a kind that the provider would not customarily release to the public. (See *Critical Mass* at 880.) The types of information that may be exempt from public disclosure pursuant to this section of the FOIA include: Business sales statistics, customer and supplier lists, research data, profit and loss data, and overhead and operating costs. Under many circumstances, FDA treats data supporting product approval applications as confidential commercial information that is entitled to be protected from public disclosure. Thus, under the amended regulation, confidential commercial information submitted to the agency that could be shared with foreign governments would include: Information (other than trade secret information protected from disclosure under section 301(j) of the act) in pending and approved applications for permission to perform studies on or to market regulated articles, such as new drugs, new animal drugs, medical devices, biological products, and food or color additives, and information in agency-prepared reviews of such applications.

FDA has taken the position in the past that it has authority to share confidential commercial information in records compiled for law enforcement purposes by FDA with foreign government officials who perform counterpart functions to FDA in a foreign country as part of cooperative law enforcement efforts. § 20.89(b). Such disclosure does not invoke the uniform access rule established by § 20.21. FDA believes that, after this final rule amends § 20.89, the agency, in its discretion and subject to the conditions imposed by this amended rule, will be able to share confidential commercial information (whether provided by sponsor or found in investigatory records) with foreign governments for use in foreign government regulatory efforts or in cooperative law enforcement efforts. After this rule is amended, FDA will be able to share with foreign governments confidential commercial information contained in applications, in agency-prepared reviews of such applications, and in agency-prepared investigatory records without invoking the rule established in § 20.21.

4. Five comments argued that the June 26, 1992 proposal would violate provisions of the Freedom of Information Act and the Trade Secrets Act. Some also suggested it was contrary to the intent of Congress and traditional FDA policy on new product innovation.

FDA disagrees with the view that it is contrary to law to disclose confidential commercial information to counterpart foreign officials under the conditions set forth in this final rule amending § 20.89.

In the first place, any disclosure pursuant to the amended regulation would not be a public disclosure. Under all circumstances, the disclosure will be on a case-by-case basis to foreign government officials under assurances of continuing confidentiality. Furthermore, the amendment establishes that FDA will not treat any disclosure made under the conditions set forth in the regulation as a public disclosure that will trigger availability of the information to a FOIA requester.

Second, it is the intention and expectation of the agency that, in most circumstances, disclosure will be made with the written authorization of the submitter of the information. FDA will consider such written authorization, once granted by the submitter for specified information, to be irrevocable for that information. FDA believes that, in most cases, sponsors will authorize these disclosures because the exchange of information is likely to facilitate review of product applications in both countries. After all, if a sponsor's product is under review in two countries, the sponsor benefits from expedited decisions that can result when reviewers can communicate with each other on confidential commercial information.

The final rule specifically references permission of the sponsor as a precondition for disclosure, except where there is a finding by the agency that disclosure is in the interest of public health by reason of the foreign government's possessing information concerning the safety, efficacy, or quality of the product or information concerning an investigation, or the disclosure is to a visiting foreign official as part of a joint review or long-term cooperative training effort, where the individual is subjected to conflict of interest safeguards and provides a written assurance of confidentiality, and the information is retained on FDA premises where document security precautions are in place.

There are situations in which it might be inappropriate to seek a sponsor's consent. For example, if communications and consultation with the submitters of the information have not resolved agency concerns, there may be circumstances in which FDA reviewers and investigators will wish to consult with foreign government counterparts who are in the possession of similar submissions by the sponsor. It may even be that, during the course of an application review, FDA employees may discover problems with studies that raise the possibility that a sponsor or his employee had engaged in deliberate fraud or misrepresentation. Similarly, there are circumstances in which FDA investigators may wish to share with foreign counterparts confidential commercial information obtained through an FDA investigation for the foreign counterparts' use in their own regulatory efforts. This could include, for example, information in an open investigation concerning customer-supplier relationships or marketing plans. This type of information is customarily held in close confidence by businesses and therefore usually protected from public disclosure by FDA in response to a FOIA request. Disclosure of this information to foreign government counterparts, however, may facilitate efforts to keep unapproved, adulterated, counterfeit, or misbranded products off world markets as well as American markets.

As the agency stated in the proposal to amend § 20.89, a disclosure to foreign officials pursuant to § 20.89 would be an "authorized" disclosure, and thus no FDA employee engaged in such a nonpublic exchange of confidential commercial information would be in violation of 18 U.S.C. 1905 (the Trade Secrets Act). That statute makes it a crime for a Federal employee to make an unauthorized disclosure of certain types of business and financial information.

5. Several comments stated that an amendment to § 20.89 would not provide legal "authorization" to prevent violation of the Trade Secrets Act because such authorization must be based on specific statutory authority.

The agency disagrees with this view. In the first place, as discussed above, the agency believes that this limited nonpublic exchange of information with foreign government counterparts does not constitute a public disclosure prohibited by the Trade Secrets Act. Second, the agency believes that a variety of provisions of the Act, as well as other statutes enforced by the agency, provide authority for such a regulation. Sections 701 and 903 of the Act (21 U.S.C. 371 and 393), e.g., give the Commissioner of Food and Drugs authority to promulgate regulations that will allow for the efficient enforcement of the Act, including determining if applicants meet approval criteria for products and protecting the public from adulterated or misbranded products,

and responsibility for research relating to food, drugs, cosmetics, and devices. Section 708 of the Act (21 U.S.C. 379) specifically authorizes sharing of nonpublic information under contractual arrangements that include security precautions. This provision has previously been implemented in § 20.90 and also forms a legal basis for § 20.89 as now amended. In implementing § 20.89, with respect to foreign visiting scientists, the agency will implement safeguards that include security precautions similar to those in place under § 20.90. A disclosure by FDA of trade secrets to visiting foreign scientists, pursuant to section 708 of the Act as implemented in the amended rule with its strict safeguards, would not violate either section 301(j) of the Act or the Trade Secrets Act.

In addition, sections 301 and 307 of the Public Health Service Act (42 U.S.C. 241 and 2421), which set forth certain general powers and duties of the Secretary of Health and Human Services, also authorize this regulation. Section 301 gives the agency a mandate to encourage, cooperate, and render assistance to other appropriate public authorities, including making available through appropriate means information relating to research and investigation. Section 307 establishes a responsibility to participate with other countries in cooperative endeavors that may advance the health of the American people. These general grants of authority, in combination with specific sections of the statutes enforced by FDA, e.g., section 301 of the Act (21 U.S.C. 331), prohibiting, inter alia, the introduction of adulterated or misbranded products into commerce between any State or Territory and any place outside that State or Territory, provide ample authorization for the promulgation of the proposed amendment to § 20.89. Finally, it should be reemphasized that this rulemaking does not affect the prohibition on disclosure of trade secret information protected by 21 U.S.C. 331(j) and in fact it contains an express provision excluding such information, except where disclosure is authorized under section 708 of the Act.

6. Nine comments stated that sponsors should have an opportunity to review information to be shared with foreign officials, and five said any disclosure of confidential commercial information should be made only with the consent of the sponsor.

The agency believes that, in most situations in which information sharing is contemplated, the written consent of sponsors should and will be obtained. As explained above, in the majority of cases, the cooperative exchange of nonpublic information with foreign government scientists will benefit individual companies as well as the public health, by permitting more timely review of pending product applications in both countries. These are situations in which sponsors would willingly consent to the limited disclosures the regulation permits. However, as discussed earlier, FDA also anticipates that regulatory activity may precede law enforcement situations requiring the disclosure of confidential commercial information, and in these cases it might be inappropriate for FDA to seek a sponsor's consent.

Also, as noted above, the final rule codifies longstanding FDA implementation of section 708 of the Act and § 21.90 with respect to cooperative training activities involving visiting foreign scientists on FDA premises in which FDA requires that such officials sign confidentiality agreements to assure that they do not disclose any nonpublic information to which they are exposed as part of their training, which may include product review activities. FDA is unaware of the occurrence of any inappropriate disclosures by individuals involved in these highly successful activities and FDA is codifying these procedures in § 20.89. The safeguards applicable to visiting foreign scientists have been continued, and FDA has strengthened them by applying certain conflict of interest prohibitions to such officials.

7. Several comments expressed concern about any further disclosure of confidential commercial information by foreign governments, based on the written permission of FDA. One comment suggested that there should be no authorization at all for further disclosure, and three comments argued that only the sponsor should be able to permit further disclosure.

FDA agrees that, in general, the sponsor needs to authorize further disclosure of confidential information. However, the agency recognizes that sponsors frequently release information concerning product applications, thereby placing such information in the public domain. There is also the possibility that information once protected from public disclosure may become legally available under FDA's FOIA regulations at some point in time. For example, summary basis of approval documents, including reviews by agency scientists, would not be available to a FOIA requester before the sponsor of a new drug application receives an approval letter from FDA. However, these summaries lose their confidential status under the agency's regulations once the application is approved. (See 21 CFR 314.430.)

In order to clarify the intent of the proposal, the final rule provides for further disclosure by the foreign government only upon receipt of the written permission of the sponsor or written confirmation by FDA that the information no longer has confidential status.

8. Several comments urged that more explicit conditions be established for the sharing of information with foreign counterparts. One comment suggested that confidential commercial information be shared only with countries with similar product approval processes. Another suggested that FDA establish lists of foreign governments that have been designated as appropriate for the sharing of confidential information. One comment expressed concern that foreign agency requests might be listed in a publicly available log.

With respect to publicly available information, FDA does not include in its FOIA log the information requests the agency receives from foreign governments. FDA views any sharing of confidential commercial information with foreign government officials as an activity that must be carried out in a confidential manner and believes that listing in a public log would be inappropriate.

FDA does not believe a list of countries that have been designated acceptable for such information exchanges would be useful. As discussed above, the exchange of information with foreign government officials will be authorized on a case-by-case basis. Although the conditions set forth in the amendment must be met before any disclosure will occur, in every case disclosure is at the discretion of the agency and cannot be automatic for any country.

With respect to the information that would be the subject of the exchange, FDA believes that concerns about continued protection of this information are adequately addressed by the foreign government's written statement of authority to protect confidential commercial information from public disclosure and its commitment not to further disclose the information except with the sponsor's permission or FDA's confirmation that the information no longer needs to be treated as confidential. In order to address concerns about the protection of such information, however, new language in the revised regulation would require, prior to the sharing of any information, either a sponsor's authorization for the disclosure or a finding by FDA that the

foreign government possesses information concerning the safety, efficacy, or quality of a product or concerning an investigation. As discussed above in response to comment 6 of section II of this document, other strict safeguards apply to visiting foreign scientists on FDA's premises.

9. Several comments suggested that FDA should require the posting of bonds, establish penalties for foreign governments that do not preserve confidentiality, or bar governments that do not protect information from receiving information in the future. One comment stated that there is no practical remedy to deal with unauthorized further disclosure.

Although FDA appreciates the difficulties of finding a practical remedy for the sponsor whose information has been the subject of an unauthorized disclosure, the agency is committed to whatever actions are appropriate. FDA is unlikely to undertake further cooperative ventures with governments that fail to live up to their written commitments.

III. The Amended Regulation

In summary, in order to facilitate the approval of products that are shown to be safe and effective, to expedite the withdrawal of approval of products that are found not to be safe and effective, and to enhance the efficiency of its enforcement efforts, FDA is issuing this final rule to amend § 20.89 to permit disclosure to foreign government officials, in the circumstances in the rule, of confidential commercial information submitted to FDA or incorporated into agency-prepared records. The Commissioner, or his or her designee, would be authorized to disclose the information after making appropriate determinations as to safeguards of confidentiality.

The amended regulation would not permit the disclosure of trade secret information that relates to manufacturing methods and processes and is entitled to protection under section 301(j) of the act, except as authorized under section 708 of the act. Circumstances might arise, however, when FDA determines that the exchange of information relating to manufacturing methods and processes would enhance the agency's ability to review an application for product approval or clinical investigation, or examine regulatory issues that have arisen with respect to a marketed product or one that is under investigation. In such circumstances, FDA would seek the permission of the submitter of the trade secret information prior to disclosing that information to foreign government officials in foreign countries.

IV. Environmental Impact

The agency has determined under 21 CFR 25.24(a)(8) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

V. Economic Impact

In accordance with Executive Order 12866, FDA has carefully analyzed the economic effects of this final rule and has determined that this final rule is not a significant regulatory action as defined by the order. FDA, in accordance with the Regulatory Flexibility Act, has considered the effect that this final rule has on small entities, including small businesses, and has determined that no significant impact on a substantial number of small entities would derive from this action.

VI. Effective Date

This rule becomes effective December 20, 1993.

VII. Comments

Interested persons may, on or before March 21, 1994 submit to the Dockets Management Branch (address above) written comments regarding this rule or other issues involving disclosure of information to foreign government officials for broader purposes, such as cooperation on global public health issues and harmonization of regulatory requirements. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. to 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 20

Confidential business information, Courts, Freedom of information, Government employees.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 20 is amended as follows:

PART 20—PUBLIC INFORMATION

1. The authority citation of 21 CFR part 20 continues to read as follows:

Authority: Secs. 201–903 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321–393); secs. 301, 302, 303, 307, 310, 311, 351, 352, 354–360F, 361, 362, 1701–1706, 2101 of the Public Health Service Act (42 U.S.C. 241, 242, 242a, 242l, 242n, 243, 262, 263, 263b–263n, 264, 265, 300u–300u–5, 300aa–1); 5 U.S.C. 552; 18 U.S.C. 1905.

2. Section 20.89 is amended by adding new paragraph (c) to read as follows:

§ 20.89 Communications with foreign government officials.

* * * * *

(c)(1) The Commissioner of Food and Drugs, or any other officer or employee of the Food and Drug Administration whom the Commissioner may designate to act on his or her behalf for the purpose, may authorize the disclosure of confidential commercial information submitted to the Food and Drug Administration, or incorporated into agency-prepared records, to foreign government officials who perform counterpart functions to the Food and Drug Administration as part of cooperative law enforcement or regulatory efforts, provided that:

(i) The foreign government agency has provided both a written statement establishing its authority to protect confidential commercial information from public disclosure and a written commitment not to disclose any such information provided without the written permission of the sponsor or written confirmation by the Food and Drug Administration that the information no longer has confidential status; and

(ii) The Commissioner of Food and Drugs or the Commissioner's designee makes one or more of the following determinations:

(A) The sponsor of the product application has provided written authorization for the disclosure;

(B) Disclosure would be in the interest of public health by reason of the foreign government's possessing information concerning the safety, efficacy, or quality of a product or information concerning an investigation; or

(C) The disclosure is to a foreign scientist visiting the Food and Drug Administration on the agency's premises as part of a joint review or long-term cooperative training effort authorized under section 708 of the act, the review is in the interest of public health, the Food and Drug Administration retains physical control over the information, the Food and Drug Administration requires the visiting foreign scientist to sign a written commitment to protect the confidentiality of the information, and the scientist provides a written assurance that he or she has no financial interest in the regulated industry of the type that would preclude participation

in the review of the matter if the individual were subject to the conflict of interest rules applicable to the Food and Drug Administration advisory committee members under § 14.80(b)(1) of this chapter. Subject to all of the foregoing conditions, visiting foreign scientists may have access to trade secret information, entitled to protection under section 301(j) of the Federal Food, Drug, and Cosmetic Act (the act), in those cases where such disclosures would be a necessary part of the joint review or training.

(2) Except as provided under paragraph (c)(1)(ii)(C) of this section, this provision does not authorize the disclosure to foreign government officials of other countries of trade secret information concerning manufacturing methods and processes prohibited from disclosure by section 301(j) of the act, unless pursuant to an express written authorization provided by the submitter of the information.

(3) Any disclosure under this section of information submitted to the Food and Drug Administration or incorporated into agency-prepared records does not invoke the rule established in § 20.21 that such records shall be made available to all members of the public.

Dated: November 15, 1993.

Michael R. Taylor,

Deputy Commissioner for Policy.

[FR Doc. 93–28467 Filed 11–16–93; 12:08 pm]

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federal register

Friday
November 19, 1993

Part IV

The President

Proclamation 6624—National Farm-City Week, 1993

Proclamation 6625—Thanksgiving Day, 1993

Federal Register
Vol. 58, No. 222
Friday, November 19, 1993

Presidential Documents

Title 3—

The President

Proclamation 6624 of November 16, 1993

National Farm-City Week, 1993

By the President of the United States of America

A Proclamation

The efficiency with which a nation produces and distributes its agricultural products largely determines the vitality, health, well-being, and economic strength of that nation. One of our Nation's great strengths is the tremendous productivity of its agricultural sector. The food and fiber that grow on our country's farms feed us, sustain us, and allow our Nation to thrive.

More than 20 million Americans—from farms to cities—are engaged in producing, processing, and marketing our agricultural supplies. They are a highly efficient team made up of farm families, people in rural communities, agribusiness industries, scientists, and retail distributors. This farm-city team is the most productive and effective in the world, demonstrating the strength and interdependence of our farms, rural areas, and cities in our economic system.

This remarkable farm-city system provides our people with produce for the smallest portion of consumers' average disposable income of any Nation. As consumers, we can use the remaining, much larger portion of our incomes for other goods, services, education, recreation, and comforts. This adds greatly to our choices in life and to our well-being, making us a more diversified, well-served people.

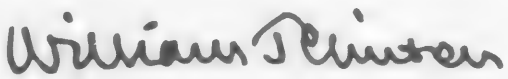
In addition, this farm-city team produces enough food in surplus of our own needs to enable the United States to be the breadbasket of the world, exporting more agricultural products than any other country. Each $1 billion of farm exports provides an additional $1.4 billion of off-farm economic activity and provides jobs for about 22,000 people on farms and in small towns and cities. Our highly competitive agricultural exports also provide the largest positive balance of trade of any U.S. industry. This, too, adds to our opportunities, our well-being, and the vitality of our economy.

Our agricultural team's unmatched productivity also makes it possible for the United States to carry out its international role as a world leader. As a strong, concerned Nation, with abundant agricultural reserves, the United States is the world's No. 1 donor of food aid in response to the needs of distressed people in other nations.

We all are indebted to the performance of the United States agricultural team. Each year since 1956, the Nation has set aside the week ending on Thanksgiving Day as "National Farm-City Week" to pay tribute to the people who put food on our tables and to give prayerful thanks for our individual blessings and the blessings of the United States of America.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by virtue of the authority vested in me by the Constitution and laws of the United States, do hereby proclaim the week of November 19–25, 1993, as National Farm-City Week. I encourage all Americans, in rural and urban communities alike, to join in recognizing the accomplishments of our farmers and all those hardworking individuals who cooperate in producing the abundance of agricultural goods that strengthen and enrich the United States.

IN WITNESS WHEREOF, I have hereunto set my hand this sixteenth day of November, in the year of our Lord nineteen hundred and ninety-three, and of the Independence of the United States of America the two hundred and eighteenth.



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Presidential Documents

Proclamation 6625 of November 17, 1993

Thanksgiving Day, 1993

By the President of the United States of America

A Proclamation

From the beginnings of our Nation, we have sought to recognize the providence and mercy of God with words and acts of gratitude, indeed with effort and energy toward helping others wherever need occurred. In the colorful days and weeks when the autumn of the year brings ripe and fruitful harvest across our land, Americans give thanks for many blessings. It is a time of bounty and generosity, a time to come together in peace.

This is the true spirit of Thanksgiving: acknowledging God's graciousness, and in response, reaching out in service to others. This spirit was apparent in Plymouth, Massachusetts, in 1621, when Pilgrim immigrants sat down with Native Americans and celebrated their common harvest.

This same spirit of Thanksgiving inspires our great Nation and our people to act with justice and concern toward all the peoples of the world and toward one another here at home. We are grateful for the dramatic progress made towards a comprehensive peace in the Middle East and for the Agreement signed in our United States; we are thankful for the relief efforts that our Nation and others have undertaken where natural disasters have struck unmercifully.

Still, in this final decade of the twentieth century, we face great challenges. The troubled areas of our world continue to challenge our ability to find peaceful and equitable solutions. On this Thanksgiving Day, the hospitality and harmony of loved ones, friends, and neighbors, remind each of us that we belong to the larger family of mankind.

As we gather together during this sacred and cherished time, let us pledge to build a new America where everyone will have a place at the table, and no one will be left out. In this way we will truly maintain the spirit of Thanksgiving that has enriched our country since its beginnings. While recognizing the importance of individual responsibility, we will continue to place the strength and benevolence of this great Nation at the service of all its people, indeed of all the peoples of the earth. Then, in these richer years, we will reap a true and fruitful harvest.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by virtue of the authority vested in me by the Constitution and laws of the United States, do hereby proclaim Thursday, November 25, 1993, as a National Day of Thanksgiving. I encourage the citizens of this great Nation to gather in their homes, places of worship, or wherever they may choose to express heartfelt thanks for the abundance bestowed on us throughout our history.

IN WITNESS WHEREOF, I have hereunto set my hand this seventeenth day of November, in the year of our Lord nineteen hundred and ninety-three, and of the Independence of the United States of America the two hundred and eighteenth.

William J. Clinton

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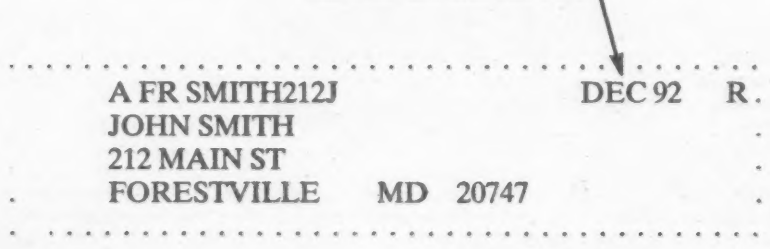

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